THE SCHOOL DISTRICT OF PHILADELPHIA BOARD OF EDUCATION

Office of Capital Programs 440 North Broad Street, 3rd Floor – Suite 371 Philadelphia, PA 19130

TELEPHONE: (215) 400-4730

Addendum No. 02

Subject: Dunbar Classroom Modernization Project

B-034C, B-035C of 2018/19

Location: Paul L. Dunbar Elementary School 3001 North 6th Street

3001 North 6th Street Philadelphia, PA 19133

This Addendum, dated February 19, 2019, shall modify and become part of the Contract Documents for the work of this project. Any items not mentioned herein, or affected by this addendum, shall be performed strictly in accordance with the original documents.

Attached are the Technical Specifications Section 11000 Environmental Coordination, Specification for Asbestos Abatement and Lead Base Paint and Stabilization and the Asbestos Inspection Report, which were inadvertently omitted from the Bidding and Contract Documents.

END OF ADDENDUM NO. 2

Attachment(s) 3

- Technical Specifications Section 11000 Environmental Coordination
- Specification for Asbestos Abatement and Lead Base Paint and Stabilization
- Asbestos Inspection Report

SECTION 11000 - ENVIRONMENTAL COORDINATION

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplemental Conditions and other Division 1 Specification Sections, apply to this section.
- B. See Section 01 1135 for Asbestos Abatement Technical Specifications:

The attached Asbestos Inspection Report (AIR), if included, is only provided as required by the City of Philadelphia Asbestos Control Regulations and is required AIR to be submitted to Licenses and Inspections with permit applications. It must be posted on site and available to all contractor personnel in order to avoid the unknowing disturbance to any asbestos containing materials. The AIR is not meant to be used as a bid document. The Asbestos Abatement Technical Specification included in these bid documents is to be used for bid purposes.

All Prime Contractors and Subcontractors (Mechanical, General, Demolition, Electrical, Plumbing, etc.) shall inform themselves fully of the scope and scale of the Asbestos Inspection Report and the asbestos abatement as it relates to this project. At no time shall any Contractor/Subcontractor disturb asbestos-containing pipe/pipe fitting insulation, vinyl asbestos floor tile, asbestos containing floor tile mastic, or any other Asbestos Containing Material listed on the Asbestos Inspection Report. All Contractors and Subcontractors shall provide a copy of the Asbestos Inspection Report to all personnel from their Company upon admission to each construction project and work zone. A mandatory pre-commencement meeting shall be attended by all Prime Contractor(s) to discuss the Asbestos Inspection Report and the School District of Philadelphia's environmental compliance policies for all Contractors.

All Prime Contractors and Subcontractors (Mechanical, General, Demolition, Electrical, Plumbing, etc.) shall inform themselves fully of the scope and scale of work above drop ceilings as it relates to the potential for Lead Based Paint throughout the facility and adhere to the requirements outlined in item 1.2 D.4 on page 4 of this section.

The Contractor shall subcontract with a licensed Asbestos Abatement Contractor to perform all demolition work associated with the boilers per the Asbestos Abatement Specification.

The following related Environmental Coordination Sections shall apply to all contractors performing renovation and construction work under this contract and associated with these bid documents.and to control all Dust, odors and impact to the occupied portions of the building

- 1.2 BACKGROUND -CONSTRUCTION, RENOVATION AND MAINTENANCE SPECIAL CONSIDERATIONS WITHIN THIS FACILITY AND ON SCHOOL DISTRICT PROPERTY
 - A. Construction, renovation and maintenance projects can generate large amounts of dust, particulates, odors and debris. All SDP contractors and Sub-contractors are responsible for preventing dust, particula, odors and debris from impacting or reaching any occupied areas within the facility as a result of any and all aspects of their work activities on this site.
 - B. All contractors shall submit a plan that identifies the location of all equipment, machines, tanks and/or vessels to be used on site and in addition documents for the inventory and storage plan and location of all chemicals that will be used on site. The plan must also include copies of all Material Safety Data Sheets (MSDS) for any products used on site.
 - C. <u>All SDP contractors and Sub-contractors shall avoid usage of any equipment and/or tools resulting in excessive noise or vibration that impacts the Educational Process during Occupied School Hours.</u>

During Construction Project

- 1.3 Provide active means to prevent dust, particulates and odors in the air from dispersing into the occupied areas of the facility. All contractors and Sub-contractors must supply and install dust walk off pads/sticky mats at all exits to allwork areas. The mat is mounted on a reusable, hard plastic, frame with a nonskid backing. When all layers of the mat are eventually used, a new refill pad can be easily installed on the reusable frame.
 - 1. Alter/isolate the air handling system in the area where the work is being performed to prevent contamination of the duct system. The contractor staff shall be responsible for blocking off supply ducts and covering return air ducts to prevent contamination with dust and particulates.
 - 2. Complete all construction barriers before construction work begins.
 - Where containment is possible; utilize building walls and doors (all doors except construction access doors), close and seal with duct tape to prevent dust and debris from escaping.
 - b. Where construction, demolition, or reconstruction is not capable of containment by utilizing existing building walls and doors, use one of the following methods of isolation:
 - Airtight plastic barriers extending from floor to ceiling decking, or ceiling tiles if not removed.
 - 2) Plastic barrier seams to be sealed with duct tape to prevent dust and debris from escaping.
 - 3) Drywall barriers. Seams or joints will be covered or sealed to prevent dust and debris from escaping.
 - 4) Seal holes, pipes, conduits and punctures to prevent dust migration.
 - 3. Place isolation barriers at penetration of ceiling envelopes, chases and ceiling spaces to stop movement of air and debris.
 - 4. When openings are made into existing ceilings in work areas, where possible, the decontamination unit should be used which will seal off openings and fit tightly from ceiling to floor.
 - 5. Construct to maintain airflow from clean area through and into work area. Require all personnel to pass through this room. Create overlapping flap (minimum of 2 feet wide) at plastic enclosures for personnel access.
 - 6. Maintain negative pressure within the work site including venting outside of the building
 - 7. Direct pedestrian traffic from construction areas away from occupied areas to limit opening and closing of doors (or other barriers) that may cause dust dispersion, entry of contaminated air, or tracking of dust to occupied areas.
 - 8. Place dust mats (walk off pads) at entrance to work area and replace or clean regularly.
 - 9. Contain construction waste before being transported in covered containers.

Upon Completion of Project

- 10. Do not remove barriers from the work area until completed project is thoroughly cleaned.
- 11. Vacuum work area including barriers.
- 12. Wet mop area and wipe down horizontal surfaces.
- 13. Remove barrier material carefully to minimize spreading of dirt and debris associated with construction.
- 14. Barrier material should be wet wiped before removal.
- 15. Remove alterations to the air handling system in the area where the work is being performed.

Contain construction waste before being transported in covered containers.

IMPORTANT – Contrary to any drawing notes or other statements in the technical specification that may indicate "Hazardous Materials by others", the scope of work for the Contractor does include requirements to remove, handle and dispose of some pre-existing regulated materials as may be necessary to complete the work outlined in the summary of work. The contract work does include selective demolition, abatement, and/or removal and disposal of pre-existing materials which are covered by occupational, environmental, health and safety regulatory programs. Contractor(s) shall be obligated to perform the contract work in consideration of the presence of these materials at the project site and will be required to perform special handling and/or abatement of these materials as required to complete the project. Contractor(s) shall integrate and sequence any required special handling and/or abatement activities within the Contractor's CPM Construction Cost and Manpower Loaded schedule. Proper procedures, precautions, protections and controls must be used with these materials in accordance with all applicable safety and environmental regulations as well as the Project Safety Manual and the Site Specific Safety Program.

- D. This Contract includes renovation work where all Contractors must be aware that the Contract Work involves work with Pre-Existing Regulated Building Materials.
 - 1. The Contract Work includes selective demolition, abatement, and/or removal and disposal of pre-existing materials which are covered by occupational, environmental, health and safety regulatory programs. Contractors shall be obligated to perform the contract work in consideration of the presence of these materials at the project site and will be required to perform special handling and/or abatement of these materials as described below. Contractors shall integrate and sequence any required special handling and/or abatement activities within the General Contractor's Coordinated CPM schedule. Proper procedures, precautions, protections and controls must be used with these materials in accordance with all applicable safety and environmental regulations as well as the Site Specific Safety Program.

All activities, including but not limited to, handling, abating, selective demolition, removal, surface preparation, or cleaning, involving the materials listed below are **not** excluded from the contract work per General Conditions.

2. **Friable and Non-Friable Asbestos Containing Materials** are expected to be encountered in replacement or repair work involving this project.

- 3. Friable Asbestos Containing Materials exists it shall be abated and are expected to be impacted by thbyn that is sub-contracted by the Contractor per these bid documents The asbestos abatement shall be performed in accordance with the direction and oversight of a licensed Asbestos Project Inspector(s) as assigned to the project(s) by the SDP OEM&S and the specifications provided in the bid documents for this project.
- 4. Due to the buildings construction date, the presence of Lead Based Paint (LBP) is possible. A detailed assessment for LBP was not conducted for this project. Nevertheless, the Contractor should expect to encounter LBP as is typical for buildings of this vintage. All surface preparation prior to painting or other specified renovation work which may result in disturbance of LBP, and is not regulated as LBP abatement under applicable state and federal regulations, is included in the contract scope of work. In work involving LBP, Contractor shall follow and document all applicable procedures required by OSHA. In addition, for schools built prior to 1978 and defined as a child occupied facility (Children under age 6) contractors performing work must comply with the US EPA LEAD Safety for Renovation, Repair and Painting (US EPA RRP) regulation. Refer to Part 4 of this section.
- Any and all waste material including waste water generated by any Lead Stabilization Activity shall be stored securely on site in 55 gallon drums supplied by the contractor. The Office of Environmental Management and Services shall be notified by the Construction Project Management team to schedule a HAZMAT pick up of drummed waste. The HAZMAT vendor will ensure the waste material is properly tested for waste characterization and proper disposal.
- 5. **Avian Droppings,** Pigeon or otherwise, if encountered during the execution of the work shall be addressed by the Contractor(s) according to the procedures of the School District of Philadelphia.
- **6.** followbest work practice, .

3.

The Contractor shall separate all used lamps removed for the project that contain mercury from other demolition waste and store them safely on site, in appropriate containers supplied by the contractor in a secure location, without breakage (breakage releases the mercury and may convert the resultant waste into "Hazardous Waste"). Mercury Containing Light bulbs include all Fluorescent bulbs, High Intensity Discharge, Mercury Vapor, Metal Halide, High-Pressure Sodium, and Low-Pressure Sodium. The storage containers supplied by the contractor must be labeled: "Used Lamps - Universal Waste". Upon accumulation of the used lamps from a completed phase of demolition, the contractor shall notify the Project Manager to arrange for the SDP Office of Environmental Management and Services (OEM&S) to properly remove them from the site for reuse or recycling per the Universal Waste regulations.

PART 2 – SILICA SPECIFICATION

2.1 FOR MASONRY GRINDING, CUTTING AND SAWING

- A. Purpose
 - 1. The purpose of this specification is to protect employees, the public, the environment and property from the detrimental affects of silica-containing dust generated from construction and restoration/maintenance activities.

B. Scope and Application

1. This specification applies to powered tools or equipment used to cut, grind, core or drill masonry or concrete materials.

C. Definitions

- Masonry Material For purposes of this specification includes, concrete block, brick, stones (natural and man-made), terra cotta tile, mortar and concrete made by mixing cement, and water with sand, and aggregate such as gravel or crushed stone. Material that is apparently stone-like in appearance and texture shall be presumed to be concrete or masonry material, unless otherwise indicated by evidence as presented by the employer.
- 2. NIOSH REL The National Institute of Occupational Safety and Health Recommended Exposure Limit. For silica this is 0.05 milligrams per cubic meter (mg/c) averaged over a 10-hour time-weighted average.
- 3. OSHA PEL The Occupational Safety and Health Administration's Permissible Exposure Limit is expressed as per 1926.55 Gases, vapors, fumes, dusts, and mists by the equation:

PEL = 10 mg/ m3 % silica + 2

- 4. Powered tools or equipment Tools in which the motive force that disrupts concrete or masonry materials is provided by a source other than human energy. Powered tools and equipment include those powered by electrical, combustion, hydraulic, chemical, or pneumatic energy.
- 5. Dust reduction system Technology that utilizes the application of water or local exhaust ventilation to reduce airborne dust generated by the use of powered tools or equipment. Local exhaust ventilation may include vacuum systems, dust collection systems, and dust exhaust systems.

D. Controls

- In all cases, engineering and/or work-practice or administrative controls that reduce dust at the source where it is being generated shall be the control of choice. In those instances where such controls cannot be used even temporarily employees shall be protected with respirators that are used as part of a respiratory protection program. Additionally, the contractor must document how they determined that engineering and/or work practice or administrative controls could not be used.
 - a. Safety and Effectiveness of Dust Control Systems
 - Procedures shall be implemented to ensure that dust reduction systems maintain their effectiveness for dust reduction throughout the work shift.
 - Dust reduction systems shall be installed, operated, and maintained in accordance with manufacturer recommendations when there are such.
 - 3) When electrical tools are used with water as a dust reduction system, it shall be done in accordance with applicable requirements of electrical safety.

b. Dust Collection/Management

- Dust shall be contained and disposed of in bags that can effectively hold dust without breaking.
- 2) Work surfaces and clothing shall be cleaned with vacuums and not by dry sweeping or the use of compressed air.
- 3) Respirators shall be worn when changing out bags or handling dust.

E. Evaluating the Effectiveness of Controls

- 1. The primary purpose of exposure monitoring and site inspections for the presence of dust is to ensure that engineering controls are effective in reducing silica dust generation. When personal air monitoring results are elevated or when there is visible dust, the contractor must intervene to determine the cause of the problem and fix it.
- 2. As soon as possible after the beginning of cutting or grinding tasks, the contractor shall conduct personal air monitoring of workers performing the cutting/grinding tasks. An industrial hygienist shall perform the monitoring and must be consulted prior to the execution of work. If personal air monitoring results indicate that the exposures are above the NIOSH Recommended Exposure Limits (REL) for silica, the contractor must ensure that the controls are functioning and being used properly. In all cases when the REL is exceeded, workers shall be provided with proper respiratory protection.
- 3. Following modification of controls as described above, the contractor shall conduct personal air monitoring to verify the effectiveness of those modifications in reducing employee exposure to silica.
- 4. If the contractor has done similar work in the past, has conducted exposure monitoring, and has records of this, the results can be used as a preliminary means to evaluate the effectiveness of controls. It is important that the previous jobs where the monitoring was conducted be similar to the current job, and that the control used be the same, including the manufacturer and model of the vacuum used.
- 5. Periodic monitoring shall be performed to assure the effectiveness of controls over time.
- 6. The contractor shall conduct daily visual inspections of the site for the presence of visible dust during grinding and cutting tasks. The presence of such dust is a sign that the controls are not doing their job.

F. Training

- 1. Employee training. An employer whose operations include using powered tools or equipment to cut, grind, core, or drill concrete or masonry materials shall provide training on the following topics to all employees prior to their assignment to jobs or work areas where the employer will be conducting these operations that potentially expose them to silica-containing dusts:
 - a. The potential health hazards of overexposure to airborne dust generated from concrete and masonry materials, including silicosis, lung cancer, chronic obstructive lung disease (COPD) and decreased lung function.

- b. Methods used by the employer to control employee exposures to airborne dust from concrete and masonry materials, including wet cutting, local exhaust ventilation systems, and process isolation, as applicable.
- c. Proper use and maintenance of dust reduction systems, including the safe handling and disposal of waste materials collected in connection with their use.
- d. The importance of good personal hygiene and housekeeping practices when working in proximity to dust from concrete and masonry materials including: not smoking tobacco products; appropriate methods of cleaning up before eating, and appropriate methods of cleaning clothes.
- e. OSHA requirements including permissible exposure limits, requirements for engineering controls, and respirator protection program requirements.
- 2. Supervisor training. Prior to supervision of employees who will be cutting, grinding, drilling, or coring concrete or masonry materials, supervisory employees shall be trained on the following topics:
 - a. The information required to be provided by subsection above. Identification of tasks the employees will perform, which may result in employee exposure to concrete or masonry dust.
 - b. Procedures for implementation of the measures used by the employer to reduce the exposure to concrete or masonry dust.
 - c. Measures for verifying the effectiveness of controls.
- 3. Periodic training. On jobs that last more than one year, the employer shall conduct the training required by this section at least annually.

G. Training Records

- 1. General Requirements: The contractor must maintain a record of all training required by this part within the preceding three (3) years for each person, who performs or directly supervises this specific job function (Masonry, Grinding, Cutting and Sawing). These training records must be maintained during the time that the person performs or supervises this job function (Masonry, Grinding, Cutting and Sawing). These training records must be kept for direct employees of the contractor as well as independent
 - contractors, subcontractors and any other person who performs or directly supervises these job functions for the contractor.
- 2. Location of Records: The contractor must retain the training records required by this part to include all initial and recurrent training received within the preceding three (3) years for all persons performing or directly supervising this job function (Masonry, Grinding, Cutting and Sawing). Records may be maintained electronically or by other acceptable means. When the person ceases to perform or directly supervise this job function (Masonry, Grinding, Cutting and Sawing) the contractor must retain the training records for an additional ninety (90) days.
- 3. Contents of Records: Each training record must contain the following:

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- a. The individual's name;
- b. The most recent training completion date;
- c. A description, copy or reference to training materials used to meet training requirements;
- d. The name of the person or organization providing the training.

H. Written Program

- The contractor shall have a site-specific, written program that contains the following elements:
 - a. Introduction: Project description, location, scope and schedule of work.
 - b. Personnel: Project manager, person in charge of silica program.
 - c. Silica dust-emitting activities: Tasks, equipment, materials, work crew.
 - d. Engineering and work-practice controls: Type of control, use and maintenance procedures and how effectiveness will be verified including personal air monitoring data and schedules for air monitoring.
 - e. Respiratory Protection Program.
 - f. Schedule: Timetable for implementing compliance program.
 - g. Hygiene procedures: Protective clothing (beside respirators) and equipment, housekeeping, hand washing stations.

PART 3 - SOIL MANAGEMENT

NOT USED FOR THIS CONTRACT.

PART 4- RENOVATION, REPAIR AND PAINTING- US EPA LEAD BASED PAINT RULE

- 01. Lead based paint (LBP) is assumed present on all painted surfaces throughout the building (i.e. walls, ceilings, pipework, ductwork, etc.). All renovation work, paint stabilization, and all other activities that impact painted surfaces shall be performed in accordance with the EPA Renovation, Repair, and Painting (RRP) rule under the Toxic Substances Control Act.
 - a. This includes all painted surfaces throughout the specified work areas.
 - b. Refer to the Architectural Floor Plans for approximate dimensions of work areas and surfaces/equipment to receive paint stabilization and repainting.
- .02 Renovation work will involve scraping of loose and flaking paint from walls, ceilings and other surfaces, repairing of wall and ceiling plaster damage, and repainting. This section is intended to specify the acceptable methods for the stabilization of all painted surfaces throughout the building.
- .03 All moveable objects shall be removed from the work area. Movable objects shall be wet wiped & HEPA vacuumed prior to their relocation to a clean area.
- .04 Cover the floor surface surfaces with taped-down polyethylene sheeting ten (10) feet from the area of paint disturbance or a sufficient distance to contain the dust, whichever is greater. If a vertical

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- containment system is constructed, the floor covering may stop at the vertical barrier, providing the barrier extends from floor to ceiling and is tightly sealed at floors, ceilings, and walls.
- .05 Close all windows and doors in the work area.
- .06 Construct an airlock at the entrance to the work area. The airlock consists of two sheets of polyethylene sheeting.
- One sheet is completely taped along all four edges. The polyethylene sheeting is then cut down the middle.
- The second sheet is only taped along the top and acts as a flap covering the slit in the first sheet of plastic.
- .07 Install tack-pads at all paint stabilization work area entrances and exits that are adjacent to areas occupied by other trades and school occupants.
- .08 De-energize all HVAC present in the work area or which pass through the work area. Close and cover all ducts openings in the work area with polyethylene sheeting.
 - .09 Unauthorized persons must be prevented from entering the active work area by posting warning signs and by establishing barriers around the work area.
- post signs clearly defining the work area and warning occupants and other persons not involved in renovation activities to remain outside of the work area. These signs should be in the primary language of the occupants and should say "Warning Lead Work Area" and "Poison, No Smoking or Eating."
- Utilize barrier tape in large areas and polyethylene sheeting on doorways.
- .10 Supply sufficient temporary lighting to illuminate the work area during paint removal and encapsulation (repainting). All electrical power shall be brought into the work areas from a temporary electric panel with ground fault interruption.
- Sufficient lighting means all active work areas shall be lighted to not less than the minimum illumination intensities listed in OSHA Regulation 29 CFR 1926.56(a), Table D-3 for Indoors: warehouses, corridors, hallways, and exit ways (e.g. 5-foot candles).
- .11 Workers shall wear protective clothing including Tyvek suits, gloves and (minimum) NIOSH-certified disposable respirators with a HEPA (High-Efficiency Particulate Air) filter (N-100, R-100, or P-100) during paint stabilization operations.
 - .12 Manually remove loose, flaking, peeling, and non-adhering paint only after misting with water. Remaining paint edges should be feathered.
- All paint chips and dust shall be in packaged in polyethylene bags or water tight drums as removal occurs. No accumulations of removed paint shall be permitted to remain in the work area.
- Before and during manual paint scraping, spray water on painted surfaces to keep dust from spreading (referred to as wet-scraping). Sanding, drilling and cutting into lead-based paint are prohibited.
 - .13 Removal of ceiling tiles littered with paint chips:

Lay plastic sheeting on the floor beneath the ceiling tiles to be removed extending at least ten (10) feet beyond the extents of removal. Carefully remove the ceiling tiles. While standing on the plastic sheeting, turn the ceiling tiles on their side and shake to allow settled plaster and

- paint chips to fall onto the sheeting below. Plastic sheeting may be moved and reused within a specific room. Once all ceiling tiles are removed and the paint chips emptied onto the sheeting, the sheeting shall be carefully rolled up for disposal.
 - .14 Surfaces shall be HEPA- vacuumed to remove residual paint and dust. Any remaining paint shall be sound and exhibiting good adherence.
- .15 Utilize two buckets to fine clean the surfaces in which lead based paint was removed.

One bucket containing a trisodium phosphate (TSP) based cleaning solution and the other bucket for rinsing.

Change the rinse water frequently and replace rags, sponges, and mop heads often.

- .16 Repaint all surfaces as per manufacturer's recommendations.
 - a. Refer to the Architectural Specifications for new paint product requirements.
- .17 Perform a final cleaning of all surfaces utilizing HEPA vacuum and wet wiping techniques.
- .18 Mist the polyethylene sheeting floor coverings before folding it dirty side inward. Sheeting used to isolate contaminated rooms from non-contaminated rooms must remain in place until after the cleaning and removal of other sheeting.
- .19 The work area should be left clean at the end of every day and must be cleaned thoroughly at the end of the job. The area must be completely free of dust and debris.
- a. Ensure that all personnel, tools, and other items, including the exteriors of containers of waste, are free of dust and debris before leaving the work area.
- b. All paint chips, dust and materials used in the construction of the containment shall be packaged in polyethylene bags or water tight drums prior to leaving the work area.
 - .20 Upon receipt of an acceptable final visual inspection, carefully dismantle materials used in the work area containment.
 - .21 Removed lead-based paint and materials used in containment shall be disposed of in accordance with the Hazardous and Universal Waste Disposal Regulations set forth by the Resource Conservation and Recovery Act (RCRA); 40 CFR 260-299.

PART 5 - EXECUTION

5.1 EXAMINATION

- A. Existing Conditions: the existence and location of Asbestos Containing Materials per the available Asbestos Inspection Report is not guaranteed to include all that may effect the major renovation.
- B. Before construction, the contractor will inspect areas of work and notify the Construction Manager of any suspected ACM not previously identified for abatement or confirmed as not containing asbestos according to the AIR prepared for the project renovation.

5.2 PERFORMANCE

A. During the major renovation contract work, if the Contractor discovers or suspects ACM in the area of work, work will not proceed in that area. The Contractor will immediately notify the Project

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Manager and the School District's Office of Environmental Management and Services who will schedule testing and abatement if required.

B. The contractor's renovation schedule must provide for the coordination and phasing of asbestos abatement activities with the renovation contract work. This shall include allowing for post-abatement final air clearance sampling as required by regulations, or as may be requested by the Philadelphia Federation of Teachers.

The Philadelphia Federation of Teacher's (PFT) Environmental Consultant shall have the option to conduct side by side final air clearance samples, within 24 hours notice of abatement project work area completion, with the Asbestos Project Inspector (API) for each work area. Samples will be collected, analyzed, and addressed, in accordance with all applicable Federal, State, and local regulations.

SECTION 11000.

SPECIFICATION for ASBESTOS ABATEMENT and LEAD BASED PAINT STABILIZATION at the DUNBAR ELEMENTARY SCHOOL 1750 North 12th Street Philadelphia, Pennsylvania 19122

prepared for:

THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF ENVIRONMENTAL MANAGEMENT
440 North Broad Street
3rd Floor, Room 3053
Philadelphia, Pennsylvania 19130

prepared by:

SYNERTECH INCORPORATED

228 Moore Street Philadelphia, Pennsylvania 19148 Project # 010-4399

December 31, 2018

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Certified Pennsylvania Asbestos Project Designer

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No. 037636

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1.00 INTRODUCTION

- .01 This specification outlines the required tasks and procedures involved in the removal of asbestos containing material (ACM) at the Dunbar Elementary School in conjunction with the Classroom Modernization Project in existing Classrooms 102, 105, 107, 108, 201, 202, 203, 204, 205, 206, 208 and 303. ACM removal, associated equipment demolition and associated decontamination cleaning procedures shall be accomplished under asbestos-abatement conditions. The Asbestos Abatement Contractor (AAC) shall be employed as a sub-contractor to the Prime General Contractor (GC) awarded this project.
 - a. The AAC shall be a current pre-qualified contractor by the School District of Philadelphia and must demonstrate they have the necessary personnel, equipment, materials, and experience to complete a project of this nature in the required time period.
- **.02** ACM removals include, but are not limited to:
 - **a.** pipe/pipe fitting insulation
 - re-insulate all piping from which abatement occurred with pre-molded fiberglass insulation with a factory applied all service jacket (ASJ SSL). Refer to Section 21.00 Re-Insulation of Pipes;
 - **b.** 9"x 9" floor tile (remove all floor tile in the areas specified including below casework and cabinetry; do not remove remaining mastic from concrete or wood floor substrates);
 - **c.** blackboard/tack board glue dots (glue dots assumed present behind blackboards/tack boards);
 - **d.** stainless-steel sink with asbestos-containing mastic on the underside in Classroom 108;
 - **e.** transite teacher demonstration table top with metal sink in Classroom 303.
 - a three-stage decontamination unit shall be required at each work area entrance where 9"x9" floor tile is scheduled to be removed in Classrooms 105, 107 and 108.
- All Prime Contractors and Subcontractors shall inform themselves fully of the scope and scale of the asbestos abatement as it relates to this project. At no time shall any Contractor/Subcontractor disturb asbestos-containing pipe/pipe fitting insulation, vinyl asbestos floor tile, asbestos-containing floor tile mastic, or any other Asbestos Containing Material listed on the Asbestos Inspection Report. Contractors and Subcontractors shall prove a copy of the Asbestos Inspection Report to all personnel from their Company upon admission to each construction work zone. A mandatory pre-commencement meeting shall be attended by all Prime Contractor(s) to discuss the Asbestos Inspection Report and the School District of Philadelphia's environmental compliance policies for all outside Contractors.
- .04 The AAC shall submit a work plan to the School District of Philadelphia Office of Environmental Services (OEMS) ten (10) days prior to beginning the project. The work plan shall include a schedule for all work areas listed in *Section 1.09*. The schedule shall be approved by OEMS and the Asbestos Project Designer prior to the commencement of work. The schedule shall include dates and timelines for the completion of all work areas listed in addition to proposed crew sizes.

- Lead based paint (LBP) is assumed present on all painted surfaces throughout the building (i.e. walls, ceilings, pipework, ductwork, etc.). Refer to Section 20.00 Lead Based Paint Stabilization for specific guidelines and procedures in stabilizing loose, flaking, peeling, and non-adhering paint. All renovation work, paint stabilization, and all other activities that impact painted surfaces shall be performed in accordance with the EPA Renovation, Repair, and Painting (RRP) rule under the Toxic Substances Control Act.
 - **a.** This includes all painted surfaces throughout the specified work areas.
 - **b.** Refer to the Architectural Floor Plans for approximate dimensions of work areas and surfaces/equipment to receive paint stabilization and repainting.
 - **c.** Refer to the Architectural Specifications for new paint product requirements.
- .06 A representative from the AAC shall attend regularly scheduled construction progress meetings while asbestos abatement is occurring during all phases of the project. The representative of the AAC must have authorization to speak for and make commitments for the AAC. The GC and AAC shall continuously coordinate to fulfill project milestones and phasing requirements. The Owner will not pay remobilization fees, charges and/or change orders issued by the GC and/or AAC.
- .07 Asbestos abatement work scope items and asbestos containing material impact may be identified in the asbestos abatement specification and/or the Construction Document drawing set. Asbestos abatement work scope items that are shown in one document and not the other shall not be cause for cost increase via change order requests.
 - a. No work shall be performed if the AAC believes the work to be performed is a change and/or addition to the work scope outlined in the construction documents without first obtaining a Notice To Proceed (NTP) from the Owner.
 - 1. The Owner shall not be responsible for compensating the AAC for work performed that is considered a change and/or addition to the construction documents without the issuance of a NTP and/or a written work directive.
- **.08** The Work Scope Summarization (*Section 1.09*) beginning on the following page consists of:
 - **a.** The Floor in which the abatement work is being performed;
 - **b.** The On-Site Room Name in which the abatement work is being performed;
 - **c.** Space Numbers;
 - **d.** Description of Material to be Removed;
 - **e.** Determination of Confirmed or Assumed Asbestos Containing Material;
 - **f.** Friability Classification;
 - **f.** Approximate Amount of Material to Be Removed and Disposed of:
 - **g.** Pertinent Comments/Description/Notes associated with the ACM to be removed, equipment to be demolished, and/or in reference to the Construction Document drawing set.

	School District of Philadelphia		Survey Type					
		Work Scope Summarization Section 1.09	6 Month Surveillance					
		Dunbar Elementary School (5250)		Three- Year Reinspection IX				
		1750 N 12th St., Philadelphia, PA 19122	X AIR/EIE					
		Prepared by: Bernard J. Bryson		X Asbestos Abateme				
		Certification # 0437 Date: 12/31/2018	Bulk Sampling Event					
		Classroom Modernization Project	Interior Renovations in Classrooms 102, 105, 107, 108, 201, 202, 203, 204, 205, 206, 208 & 303					
F I O O r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Comments/Description/Notes
1	102	Classroom 102	Pipe Insulation 2-6 inch	Confirmed	FRI	8	LF	Metal Jacketing may be Present
1	102	Classroom 102	Blackboard Glue Dots	Assumed	NF1	80	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
1	102A	Coat Closet inside Classroom 102	Floor Tile VAT 9" x 9"	Confirmed	NF1	120	SF	
1	105	Classroom 105	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	Metal Jacketing may be Present
1	105	Classroom 105	Floor Tile VAT 9" x 9"	Confirmed	NF1	950	SF	
1	105	Classroom 105	Blackboard Glue Dots	Assumed	NF1	220	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
1	107	Kindergarten 107	Pipe Fitting Insulation	Confirmed	FRI	1	EA	
1	107	Kindergarten 107	Pipe Insulation 2-6 inch	Confirmed	FRI	36	LF	Metal Jacketing may be Present
1	107	Kindergarten 107	Floor Tile VAT 9" x 9"	Confirmed	NF1	1120	SF	
1	107	Kindergarten 107	Blackboard Glue Dots	Assumed	NF1	140	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
1	107B	Kindergarten 107 Restroom	Pipe Fitting Insulation	Confirmed	FRI	4	EA	
1	107B	Kindergarten 107 Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	20	LF	Metal Jacketing may be Present
1	107C	Kindergarten Classroom 107 Closet	Pipe Fitting Insulation	Confirmed	FRI	5	EA	
1	107C	Kindergarten Classroom 107 Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	32	LF	Metal Jacketing may be Present
1	108	Classroom 108	Pipe Insulation 2-6 inch	Confirmed	FRI	8	LF	Metal Jacketing may be Present
1	108	Classroom 108	Floor Tile VAT 9" x 9"	Confirmed	NF1	800	SF	
1	108	Classroom 108	Blackboard Glue Dots	Assumed	NF1	160	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
1	108	Classroom 108	Sink Undercoat Mastic	Assumed	NF1	6	SF	1 Sink - 6 SF
1	108B	Closet inside Classroom 108	Floor Tile VAT 9" x 9"	Confirmed	NF1	50	SF	
2	201	Classroom 201	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	Metal Jacketing may be Present
2	201	Classroom 201	Blackboard Glue Dots	Assumed	NF1	220	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	202	Classroom 202	Blackboard Glue Dots	Assumed	NF1	80	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	203	Classroom 203	Pipe Insulation 2-6 inch	Confirmed	FRI	24	LF	Metal Jacketing may be Present
2	203	Classroom 203	Blackboard Glue Dots	Assumed	NF1	220	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	204	Classroom 204	Blackboard Glue Dots	Assumed	NF1	140	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	205	Classroom 205	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	Metal Jacketing may be Present

		School District of Philadelphia	Survey Type					
		Work Scope Summarization Section 1.09	6 Month Surveillance					
		Dunbar Elementary School (5250)		Three- Year Reinspo	ection IX			
		1750 N 12th St., Philadelphia, PA 19122	X AIR/EIE					
		Prepared by: Bernard J. Bryson	X Asbestos Abatement Activity					
		Certification # 0437 Date: 12/31/2018	Bulk Sampling Event					
		Classroom Modernization Project	Interior Renovations in Classrooms 102, 105, 107, 108, 201, 202, 203, 204, 205, 206, 208 & 303					
F I o o r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Comments/Description/Notes
2	205	Classroom 205	Blackboard Glue Dots	Assumed	NF1	220	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	206	Classroom 206	Pipe Fitting Insulation	Confirmed	FRI	1	EA	
2	206	Classroom 206	Pipe Insulation 2-6 inch	Confirmed	FRI	9	LF	Metal Jacketing may be Present
2	206	Classroom 206	Blackboard Glue Dots	Assumed	NF1	140	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	208	Classroom 208	Pipe Fitting Insulation	Confirmed	FRI	2	EA	
2	208	Classroom 208	Pipe Insulation 2-6 inch	Confirmed	FRI	8	LF	Metal Jacketing may be Present
2	208	Classroom 208	Blackboard Glue Dots	Assumed	NF1	140	SF	Glue Dots Assumed Present behind Blackboards/Tack Boards
3	303	Classroom 303	Transite Tabletops	Assumed	NF2	1	EA	Teacher Demonstration Table Top with Metal Sink - 20 SF

- .10 Stated quantities are approximate. By submitting a bid, the AAC signifies they have visited the site, examined conditions that may affect the work, verified quantities of materials, and is informed as to the extent and character of the project. Any discrepancies from stated footages shall not be cause for a contract cost adjustment.
 - **a.** The City of Philadelphia Asbestos Inspection Report (AIR) that accompanies this Specification shall NOT be used for bidding purposes.
- .11 The AAC shall furnish all labor, materials, employee training, services, permits, fees, insurance and equipment necessary to carry out the asbestos removal, decontamination operations and disposal in accordance with EPA, OSHA, and all other applicable Federal, State, and local government regulations, and this Specification.

2.00 GENERAL ABATEMENT PROJECT CONDITIONS

- .01 The asbestos abatement work areas listed in *Section 1.09* are Minor and Non-Friable Projects as defined by the Philadelphia Asbestos Control Regulation (ACR) and shall comply with all requirements therein.
 - **a.** The AAC shall have a PA licensed Supervisor on site at all times during asbestos abatement activities. The AAC shall not perform any abatement activities, including prep, bag-out, and teardown unless a City of Philadelphia certified API is on site.
 - **b.** The AAC shall provide a schedule for all work areas listed. The schedule shall be approved by the Owner and API prior to the commencement of work. The schedule shall include dates and timelines for the completion of all work areas listed in addition to proposed crew sizes.
- .02 If the AAC seeks a change in the procedures and/or methods for accomplishing a certain asbestos abatement task, the AAC may submit a written request to the Asbestos Project Designer for an alternative method, identifying the procedure for which an alternative is being sought, and the reason for seeking a change. The Asbestos Project Designer shall review the request and render a decision within twenty-four (24) hours of receipt of the written request.
- .03 The Owner, API, and AAC shall conduct an inspection for existing damages prior to the commencement of work. All parties shall agree in writing on building conditions and list all damaged materials, furnishings, etc.
- .04 AAC access shall be confined to the work areas indicated in this Contract. The Contract may be proceeding concurrently with others in the building. The AAC shall cooperate fully with the other Contractors in expediting the work of all trades, and avoid damage to the work of the other Contractors.
- .05 The AAC shall be served with a <u>Stop Work Order</u> by the Project Designer and/or API when they are in non-compliance with this Contract Specification and/or other pertinent regulations (Refer to *Section 3.01.a-p*).
 - **a.** The project shall remain halted until all matters identified in the <u>Stop Work Order</u> are corrected.

- .06 If it is determined that airborne asbestos contamination has occurred "outside the work area" adjacent to an active asbestos abatement work area, the AAC shall contain and clean the affected premises under the direction of the API at no additional cost to the Owner. Causes for "outside the work area" airborne asbestos contamination include, but are not limited to:
 - **a.** The loss of a negative pressure differential inside any active asbestos abatement work area;
 - **b.** A breech of containment into any active asbestos abatement work area;
 - **c.** Improper maintenance of AFDs/HEPA vacuums (Refer to Section 14.07.a-c.1-2)
 - **d.** Improper worker decontamination procedures;
 - **e.** Negligence of the AAC;
 - **f.** Any other poor work practices of the AAC.
- .07 The Owner reserves the right to require asbestos abatement and associated work is performed at times when the building is unoccupied.

3.00 QUALITY ASSURANCE

- .01 All work and disposal shall be performed in compliance with all applicable Federal, State, and local regulations including, but not limited to:
 - **a.** 29 CFR 1926.1101 (OSHA);
 - **b.** 29 CFR 1926.501 (OSHA);
 - **c.** 40 CFR Part 61 (NESHAP);
 - **d.** 40 CFR Part 763 (AHERA);
 - **e.** 40 CFR 761 (PCB Regulations);
 - **f.** Resource Conservation and Recovery Act (RCRA);
 - **g.** 40 CFR 300-399, EPA Comprehensive Environmental Response Compensation & Liability Act
 - h. 40 CFR 745, EPA Toxic Substances Control Act; LBP Poisoning Prevention
 - i. EPA Renovation, Repair, and Painting (RRP) rule under the Toxic Substances Control Act
 - **j.** 49 CFR 171-180, DOT Hazardous Material Regulations
 - **k.** 42 CFR Part 84 & 30 CFR Part 11 (NIOSH/DHHS respirator standards);
 - **l.** the Asbestos Control Regulation (Philadelphia Department of Public Health);
 - m. Act 194 & Act 161 (Pennsylvania Department of Labor and Industry);
 - **n.** Section F-315.8 (R) of the Philadelphia Fire Prevention Code;
 - **o.** NADCA ACR 2006 (HVAC System cleaning standards);
 - **p.** this Specification.
- .02 The AAC has the responsibility of informing themselves fully of the requirements of these agencies and shall satisfy completely this Specification and all referenced regulations. All other applicable federal state and local regulations are incorporated by reference.
- .03 The AAC must be a City of Philadelphia Licensed Asbestos Abatement Contractor as well as a Pennsylvania Licensed Asbestos Contractor and employ asbestos workers certified to work in the state of Pennsylvania.
- .04 The Philadelphia Federation of Teacher's (PFT) Environmental Consultant shall have the option to conduct side by side final clearance air samples within 24 hours of notice of work area completion with the API. Samples will be collected, analyzed, and addressed, in accordance with all applicable, Federal, State, and local regulations.
 - **a.** Samples may be collected and analyzed via PCM and/or TEM.
 - **b.** Results shall be evaluated in accordance with the ACR and AHERA.
 - c. Acceptable airborne fiber concentrations for individual "outside the work area" air samples shall be < 0.010 f/cc for PCM and < 0.010 s/cc for TEM.

4.00 NOTIFICATIONS

- .01 The AAC shall notify all applicable agencies including the EPA, DEP, and Philadelphia Air Management Services, using the appropriate form(s), ten (10) days prior to the commencement of asbestos abatement projects.
- .02 The AAC shall submit written notification of the asbestos abatement project schedule to the local police and fire departments ten (10) days prior to beginning the project.
- .03 The Owner shall provide a minimum of ten (10) calendar days advance notification of intended asbestos abatement to all occupants. This notice shall conform to the Philadelphia ACR, *Section VI.B.2* and shall remain posted until the re-occupancy standard is met.

5.00 MANDATORY MEETINGS/SUBMITTALS

- **.01 Pre-construction meeting** The AAC shall attend a pre-construction meeting scheduled by the Owner. The AAC shall submit to the Owner the following, if not already submitted:
 - **a.** Copies of required notifications, insurance, and bonds.
 - **b.** Progress schedule
 - 1. The AAC shall provide a schedule for all work areas listed. The schedule shall be approved by the Owner and API prior to the commencement of work. The schedule shall include the number of active abatement work areas at any given time, proposed crew sizes, and waiting periods following the delivery of the work area to the API for final visual inspections and clearance testing.
 - **c.** Work plan delineating phasing and preparation of the work site, including intended locations of water and electrical sources, and the intended storage locations for furniture and ceiling mounted light fixtures and other ceiling mounted items. Description of decontamination sequence, removal methods to be used and waste handling.
 - **d.** Supervisor credentials and delineation of responsibility for work site supervision, including name, telephone number and pager number for both the project manager and the on-site supervisor.
 - **e.** Worker qualifications, current licenses, fit tests, and medicals. These may be submitted as the crew is selected or changed, however, no workers will be permitted to remain on site without submission and approval of qualifications.
 - **f.** Safety Data Sheets (SDS) for the materials to be used on the job:
 - **1.** Asbestos abatement encapsulant (only encapsulants approved by the Department of Public Health may be used);
 - **2.** Heavy-duty polyethylene tape used for sealing fixed objects, the construction of critical barriers, decontamination chambers and floor/wall containments:
 - **g.** Name of Waste Hauler(s) and disposal site with EPA/DEP identification numbers;
 - **h.** Name of the firm or competent person performing the AACs OSHA required personnel monitoring and the laboratories PAT Certification and Philadelphia Laboratory Certification;
 - i. A detailed *written* description of emergency procedures to be followed in the event of injury or fire. This submittal must include execution procedures, source of emergency assistance (including telephone numbers), and access procedures to be used by emergency personnel.
- .02 Progress meetings Meetings shall be held at the job site at the discretion of the Owner/Construction Manager/API to discuss the progress of the work, phasing and other Contractor coordination, work schedule, and any conflicts or problems. The representative of the AAC must have authorization to speak for and make commitments for the AAC. The GC and AAC shall continuously coordinate to fulfill project milestones and phasing requirements. The Owner will not pay remobilization fees, charges and/or change orders issued by the GC and/or AAC.

6.00 OWNER'S RESPONSIBILITIES

- .01 The Owner shall employ the services of an Asbestos Project Inspector (API) who is licensed by the City of Philadelphia to perform asbestos project inspection as defined by the Asbestos Control Regulation (ACR).
- .02 The Owner shall ensure the work areas will be unoccupied prior to abatement activity commencing.
- .03 The Owner shall make water and electricity available at the site at no cost to the AAC. The Owner and/or Construction Manager shall notify the AAC of scheduled system shut downs to ensure no interruptions to the project's engineering controls.
- .04 The Owner shall be responsible to remove all computers, monitors, printers, all other computer related components, personal effects, books, or other items deemed too valuable or sensitive to leave in the scheduled work areas to be handled by the AAC. A list of such items includes:
 - **a.** Personal items throughout any previously mentioned work areas;
 - **b.** All computers and computer accessories in any previously mentioned work areas;
 - **c.** Stored maintenance and building supply items, paper products, paints, cleaners, replacement ceiling tiles and florescent light bulbs, excess furniture, etc. located in any of the work areas scheduled for abatement, demolition and/or cleaning.
 - **d.** Any other items deemed appropriate by the Owner.
 - **e.** The Owner shall store items in areas not scheduled for asbestos abatement work.
 - f. The Owner shall send written notices to the appropriate and responsible School District personnel at the Dunbar Elementary School informing them of this responsibility and the limit of the AACs responsibilities.
 - **g.** Any movable items remaining in the scheduled work areas at the time of the mobilization of the AAC shall be removed by the AAC.

7.00 ASBESTOS ABATEMENT CONTRACTOR'S (AAC) RESPONSIBILITIES

- .01 The AAC is responsible for visiting the site and verifying quantities of asbestos containing materials, locations of utilities, and waste out routes *prior to* submitting a bid.
 - **a.** No work shall be performed if the AAC believes the work to be performed is a change and/or addition to the work scope outlined in the construction documents without first obtaining a Notice To Proceed (NTP) from the Owner.
 - 1. The Owner shall not be responsible for compensating the AAC for work performed that is considered a change and/or addition to the construction documents without the issuance of a NTP and/or a written work directive.
- **.02** Project phasing, start and completion dates are subject to change at the discretion of the Owner.
- .03 The AAC shall provide all labor, tools, materials and scaffold necessary to complete the project safely, in a timely fashion, and in accordance with the specification and all applicable regulations.
 - **a.** All tools, ladders, equipment, etc. shall arrive at the project site in good condition and free of any visual residual asbestos contamination.
- Any movable items remaining in the scheduled work areas at the time of the mobilization of the AAC shall be removed by the AAC.
- .05 The AAC shall protect all non-movable furniture, cabinetry and equipment from damage throughout the duration of this project.
- .06 The AAC shall supply, at their own expense, all construction materials, supplies, and all electrical, water, and waste connections, tie-ins, or extensions. Temporary service lines shall be installed to prevent tripping, slipping or falling. The AAC must utilize a licensed electrician to install separate temporary electric panels, receptacles, and lights, all with ground fault interruption and current-overload protection. All temporary electrical set-ups shall be in accordance with OSHA regulation and NEMA standards.
- .07 The AAC shall maintain current copies of certifications for workers on-site, and shall keep copies of all pertinent specifications and regulations on-site. The API retains the right to prohibit work by employees without current certifications.
- .08 The AAC shall maintain a detailed sign-in/sign-out log, which must be filled out by every person entering the work area. All entries shall be complete and legible.
- .09 The AAC shall be responsible for security of the work site, fire/smoke detection, and maintenance of existing utility systems as it relates to the performance of this project.
- .10 The AAC shall provide fire protection in accordance with all State and Local codes. This includes, but is not limited to:

- **a.** Providing a written fire prevention and emergency action plan.
- **b.** Providing multi-purpose ABC rated fire extinguishers, insuring that on-site personnel are aware of the location and proper use of all fire extinguishers and other safety equipment.
- **c.** Performing a fire watch of the overall work area.
- **d.** Designating a safety coordinator to implement the above actions. The AACs safety coordinator shall be responsible for:
 - 1. Fire/life safety entries shall be entered into the AACs log daily and shall be submitted with the AAC's final report.
 - 2. Daily entries shall include names, dates, duration, problems & corrective actions taken by the fire watch must be signed by the safety coordinator.
- .11 Assure protection of AFD exhaust ducts from damage during asbestos abatement activities.
- .12 The AAC Supervisor and API shall perform a visual inspection of the entire floor immediately below all active abatement work areas at the end of each 8-hour shift to verify that no water leaks, fallen material, or any other type of damage has occurred.
 - **a.** If water leaks, fallen material, or any other type of damage has occurred:
 - 1. all asbestos abatement work shall be halted;
 - 2. the API shall immediately notify the Asbestos Project Manager, Construction Manager and Owner for direction and input;
 - 3. the source of the leak or damage shall be determined;
 - **4.** the containment breech issue shall be rectified before any asbestos abatement work will be permitted to continue.
- .13 As required by the Asbestos Control Regulation, the AAC shall provide a minimum 18" square transparent viewing window consisting of shatterproof material greater than or equal to 1/8" in thickness located at a height appropriate for accessible viewing and in such a manner as to maximize visibility of the abatement work area.
- .14 During the performance of final cleaning of all surfaces inside the active abatement work area, all horizontal surfaces "outside the work area" shall also be cleaned. This includes the dirty, shower and clean rooms of decontamination chambers attached to the asbestos abatement work area being tested and all immediate surroundings of representative makeup air entering each independent asbestos abatement work area being tested.

8.00 ASBESTOS PROJECT INSPECTOR'S (API) RESPONSIBILITIES

- .01 The API shall act as the Owner's representative on the work site to assure and document compliance with this Specification and applicable regulations and to perform all project sampling and analysis required by the Philadelphia ACR and AHERA.
- .02 The API shall be responsible to see that required information and notifications are posted and are accessible for review by all concerned parties.
- .03 The API shall keep a daily log documenting the progress and performance of the AAC over the course of the project.
- .04 The API shall perform continuous inspections to monitor the performance of the AAC and to assure and document compliance with this Specification and applicable regulations. Inspections shall be performed during all phases of the project including verifying compliance with standard operating procedures, checking engineering controls, personal protection and decontamination systems, and handling and disposition of the resulting asbestos waste materials.
- .05 The API shall be responsible for performing all project sampling and analysis required by the Philadelphia ACR and AHERA.
 - **a.** The API shall also perform representative personal air sampling on themselves during the project as defined within OSHA 1926.1101 and 1910.1001. Personal air samples shall be collected to establish a time weighted average (TWA) and a short-term excursion limit (STEL). Such air samples shall be collected within the breathing zone and used to:
 - **1.** initially determine the level of respiratory protection;
 - **2.** subsequently to assure that such protections remain adequate throughout the project.
- .06 The API shall routinely perform smoke testing at all critical barriers throughout the performance of asbestos abatement activities until the receipt of acceptable clearance air sample results to verify the integrity of critical barriers and presence of an adequate negative pressure differential.
- .07 The API shall notify the Owner and Air Management Services of the City of Philadelphia if the AAC is found to be in non-compliance with the technical specifications or those Municipal, State or Federal regulations applicable to this project.
 - **a.** The API shall serve written notice to the AAC for all AAC non-compliance actions.

- .08 The AAC Supervisor and API shall perform a visual inspection of the entire floor immediately below all active abatement work areas at the end of each 8-hour shift to verify that no water leaks, fallen material, or any other type of damage has occurred.
 - **a.** If water leaks, fallen material, or any other type of damage has occurred:
 - 1. all asbestos abatement work shall be halted;
 - 2. the API shall immediately notify the Asbestos Project Manager, Construction Manager and Owner for direction and input;
 - 3. the source of the leak or damage shall be determined;
 - **4.** the containment breech issue shall be rectified before any asbestos abatement work will be permitted to continue.
- .09 The API shall conduct a detailed final inspection to ensure that no visible dust or debris remains on any surfaces. This includes all surfaces inside the abatement work area and all horizontal surfaces in the immediate surroundings of representative makeup air entering each independent asbestos abatement work area being tested.

9.00 AIR MONITORING BY THE OWNER

- .01 The Owner shall employ the services of an API who is in licensed by the City of Philadelphia to perform air monitoring and quality assurance of the AACs work practices.
- .02 The API shall collect pre-test and project air samples in accordance with the Philadelphia Asbestos Control Regulations and AHERA. Project air monitoring during abatement activities shall include samples inside and outside the work area to ensure airborne fiber concentrations remain at acceptable levels. Acceptable airborne fiber concentrations outside the work area shall be < 0.010 f/cc for PCM and < 0.010 s/cc for TEM. The API may also perform discretionary random personnel monitoring. Pre-test and project samples shall be analyzed via Phase Contrast Microscopy (PCM), NIOSH Method 7400.
 - **a.** Transmission Electron Microscopy (TEM) sampling may be performed in locations outside the containment work areas at the owner/consultant's discretion throughout the abatement project. Results shall be evaluated in accordance with AHERA and/or the ACR.
- .03 The API shall provide clearance air sampling:
 - **a.** For Major Projects, five (5) clearance samples shall be collected and analyzed via TEM. Results shall be evaluated in accordance with the ACR.
 - **b.** For Small and Minor Projects, five (5) clearance samples shall be collected and analyzed via Phase Contrast Microscopy (PCM) or TEM. Results shall be evaluated in accordance with the ACR.
 - c. For Non-Friable Projects, five (5) clearance samples shall be collected and analyzed via Phase Contrast Microscopy (PCM) or TEM. Results shall be evaluated in accordance with the ACR.
 - **d.** Clearance air sampling shall be performed using aggressive techniques. Sampling procedures and clearance criteria shall follow all requirements of the Philadelphia ACR and AHERA.
- .04 The Owner shall be responsible for costs incurred for the initial required laboratory work. Any subsequent testing required due to limits exceeded during abatement or any clearance sampling shall be paid by the AAC. These costs include both labor and analysis.
 - **a.** The API shall invoice the Owner, on a separate invoice, for all costs relating to labor and analyses resulting from additional testing required due to limits exceeded during abatement or failure of first round clearance sampling.
 - **b.** The AACs contract amount shall be reduced by an amount equal to the costs for labor and analyses resulting from additional testing required due to limits exceeded during abatement or failure of first round clearance sampling.
 - **c.** The Owner shall retain possession and ownership of all air sampling data and documentation.

- .05 The Z-test method found in 40 CFR 763, Subpart E., Appendix A, is a test method in which inside and outside area averages can be used to pass an area based upon the outcome of the arithmetic comparison of both areas. However, the analysis and comparison of the inside and outside air samples via the Z-test method is not permitted as part of this project.
 - **a.** Inside the work area samples shall be analyzed using the geometric mean. Outside the work area samples shall be analyzed and compared independently.
 - 1. An Exceedance of the geometric mean inside the work area and/or an exceedance of 0.010 s/cc outside the work area shall require corrective action recleaning by the AAC.
 - b. Inside and outside final clearance air samples shall be collected and analyzed via PCM or TEM. Results shall be evaluated in accordance with the ACR and AHERA.
 - c. Acceptable airborne fiber concentrations for individual "outside the work area" air samples shall be < 0.010 f/cc for PCM and < 0.010 s/cc for TEM.
 - **d.** During all phases of the project, the API/Consulting Firm shall be required to notify the Department of Public Health in the event an "outside the work area" air sample is in exceedance of 0.01 s/cc.

10.00 AIR MONITORING BY THE ASBESTOS ABATEMENT CONTRACTOR (AAC)

- .01 The AAC shall perform representative personal air sampling as defined within OSHA 1926.1101 and 1910.1001. Personal air samples shall be collected to establish a time weighted average (TWA) and a short-term excursion limit (STEL). Such air samples shall be collected within the breathing zone and used to:
 - **a.** initially determine the level of respiratory protection;
 - **b.** subsequently to assure that such protections remain adequate throughout the project.
- .02 Sampling strategy and protocols shall be determined by a competent sampling professional according to NIOSH 7400 method. The AAC shall have a competent person collect personal air samples.
- .03 Personal air sample results must be posted within 24 hours of sample collection.
- .04 AAC personnel shall comply with the personal air sampling of the competent person and shall not interfere with or alter sampling protocol.

11.00 SCAFFOLDING/WALKWAYS/HOISTS/LADDERS

- .01 The AAC shall use appropriate ladders, scaffolds, lifts, and/or hoists to provide safe access for equipment demolition and removal of ACM. Personnel safety lines and harnesses are required where appropriate.
 - **a.** Fall protection equipment and guidelines shall comply with OSHA Regulation Standards 29 CFR 1926.501.
- .02 All scaffolding shall be of sound condition and assembled per OSHA requirements on a level, secure base. Scaffolding shall not be overloaded. The scaffolding shall be secured or tied into the building whenever possible. Guardrails consisting of top and mid-rails and toe boards shall always be installed. A post set-up inspection and daily inspections shall be conducted. Scaffold work platforms shall comply with OSHA Regulation Standards 29 CFR 1926.451.
- .03 All stairs, platforms, catwalks and walking surfaces shall be kept, as is practical, free from obstructions, accumulation of water, and tripping hazards, and where elevated, be protected by OSHA specified top-rails, mid-rails, and toe boards.
- Ladders of sufficient quantity and of suitable length or height shall be provided. Only electrically non-conductive materials, such as wood or fiberglass, shall be used. Ladders shall be kept in good repair and inspected regularly. Personnel shall be instructed in the proper use of ladders. No structural alterations shall be made to any ladder.
- .05 All ladders, scaffolds, lifts, and/or hoists shall arrive at the project site in good condition and free of any visual residual asbestos contamination.

12.00 RESPIRATORY AND PERSONAL PROTECTIVE EQUIPMENT

- .01 The AAC shall provide approved respirators and protective clothing to all workers. Authorized representatives of the Owner, State or other Government entity who arrive to inspect the work site shall be permitted access to the work area provided the visitor arrives with their own approved respirator. Protective clothing shall be provided to these visitors by the AAC.
 - **a.** The AAC shall provide approved respirators to all visitors that can provide proof that a Pulmonary Function Test, Medical exam and chest x-ray has been performed on the visitor, and that a doctor has performed a pulmonary evaluation of the visitor indicating that the visitor has been deemed able to safely wear a respirator.
- .02 The AAC shall require that each person entering the work area shall wear an approved respirator and protective clothing. There shall be no exceptions to this rule.
- **.03** Respiratory protection shall be in compliance with:
 - **a.** OSHA regulations 29 CFR 1910.1001, 1926.1101, and 1910.134;
 - **b.** ANSI Z88.2-1980;
 - c. NIOSH 30 CFR Part 11 for type B and C respiratory protection;
 - **d.** NIOSH and DHHS 42 CFR Part 84 for non-powered, air-purifying particulate-filter respirators.
- At a minimum, the respiratory protection at the start of the project shall be Type B (PAPR). After the initial exposure assessment establishes the expected airborne asbestos concentrations during removal, the respiratory protection shall be:
 - **a.** .01-1.0 f/cc Dual Cartridge, Air Purifying respirator, Type A.
 - **b.** 1.0-2.5 f/cc Powered Air Purifying Respirators Type B (PAPR).
 - c. >2.5 f/cc- Supplied Air with Constant Flow Type C.
- All persons performing asbestos abatement work requiring respiratory protection (including Type B) shall be clean shaven and have an unobstructed face mask seal. Only mustaches that do not exceed the corners of the upper lip and sideburns that do not extend below the earlobes are permitted.
- .06 For containments with an attached three (3) stage decontamination unit, asbestos workers shall wear a single disposable suit including hood and footwear. Before exiting the work area, the workers shall remove their respirator filters and disposable suit in the shower after appropriate wetting. These shall be disposed of as asbestos waste.
- .07 For containments utilizing a remote decontamination unit, asbestos workers shall wear two (2) disposable Tyvec-type suits. Before exiting the work area, the worker shall remove both suits and change into a clean disposable suit in the one-stage chamber. The worker shall immediately proceed to the remote centralized, decontamination chamber, equipped with a shower and clean room. Dispose of clean suit and respirator cartridges in the centralized decontamination chamber.

a. The use of a remote decontamination FOR MAJOR PROJECTS requires the submission of an Alternative Method Request to the City of Philadelphia's Air Management Services, Asbestos Division, and receipt of approval by that office.

13.00 DECONTAMINATION FACILITIES

- .01 The AAC shall construct and place a three-stage decontamination unit at the entrance to Classrooms 105, 107 and 108.
- .02 Three stage decontamination units shall be constructed as described below:
 - **a.** Three-stage unit (clean room, shower room, equipment room):
 - 1. Interior of the chamber shall be covered with two layers of six (6) mil polyethylene with triple flap airlocks installed between each chamber;
 - 2. Shall have a sturdy frame comprised of studs and 3/8 "plywood.
 - **3.** Entrance shall be equipped with a secure, lockable plywood door with louver system;
 - **4.** Shall have danger signs posted at the entrance;
 - 5. Shall be provided with hot and cold water for use in the shower room;
 - 6. Shower water shall be added to waste materials or pumped through a five (5) micron filter element prior to discharging it to the sanitary sewer or floor drains.
- .03 For all other Minor and Non-Friable Projects, a one-stage decontamination unit shall be constructed and placed at the entrance to the work area, with a two-stage centralized decontamination unit/shower constructed prior to work in any project areas. Decontamination units shall have a sturdy frame comprised of studs or equivalent.
- .04 One stage decontamination units shall be constructed as described below:
 - **a.** One-stage unit:
 - 1. Interior of the chamber shall be covered with two layers of six (6) mil polyethylene and triple flap airlocks shall be placed at entrance and exit;
 - 2. Shall have a sturdy frame comprised of studs or an approved equivalent.
 - **3.** Shall have danger signs posted at the entrance;
 - 4. Workers shall wear double suits while in the work area. Prior to exiting a contaminated work area, the worker shall change into a clean Tyvek suit prior to proceeding to the centralized, two stage, decontamination chamber, equipped with a shower, provided with hot and cold water, and a clean room. Dispose of suit and respirator cartridges in the centralized decontamination chamber.
 - 5. Shall be accompanied with a two-stage remote decontamination unit that provides hot and cold water for use in the shower room;
 - 6. Shower water shall be added to waste materials or pumped through a five (5) micron filter element prior to discharging it to the sanitary sewer or floor drains.
- .05 Decontamination units shall have a sturdy frame comprised of studs or equivalent.
- .06 The AAC shall provide one decontamination chamber for every eight (8) workers.
- **.07** Asbestos abatement shall not commence until the AAC can demonstrate to the API that the shower unit is fully operational.

14.00 GENERAL PREPARATION FOR ALL ASBESTOS ABATEMENT ACTIVITIES

- .01 The AAC shall confine their apparatus, the storage of materials, tools, supplies and the activities of their workman to the limits established by the Owner and local ordinances.
- .02 The AAC shall assure that building exits are not obstructed and that appropriate safety barriers are established to prevent access by unauthorized persons. The works areas are to be kept neat, clean and safe.
- .03 The AAC shall post OSHA specified, asbestos specific danger signs at the entrance to each work area. Such signs shall also be posted when applicable to decontamination chambers, bagout chambers, critical and separation barriers, and waste storage containers.
- **.04** Provide isolation barriers to separate the abatement work areas from the remaining occupied areas of each floor.
- .05 All necessary building occupants remaining in the building during the asbestos abatement project shall be denied access to the asbestos abatement work area(s) by isolation barriers and/or locked doors.
- .06 All moveable objects shall be removed from the work area. Movable objects shall be wet wiped & HEPA vacuumed prior to their relocation to a clean area.
- .07 AFDs and HEPA vacuums require different maintenance schedules and attention depending on the model. Check the user's manual to determine and comply with the maintenance, filer replacement, and cleaning requirements of each AFD and HEPA vacuum being used.
 - **a.** At no time shall an AFD be dismantled and the inner HEPA filter replaced while onsite at the Dunbar Elementary School. Removal and replacement of HEPA filters shall be performed offsite.
 - **b.** At no time shall a HEPA vacuum be opened for cleaning/emptying outside an active asbestos abatement work area of the Dunbar Elementary School.
 - c. Cleaning/emptying a HEPA vacuum shall be performed INSIDE an active asbestos abatement work area with a minimum negative pressure differential of -0.02 inches of water column.
 - 1. Cleaning/emptying of HEPA vacuums shall be performed directly beside an operating AFD exhausting to the exterior.
 - 2. HEPA vacuums shall be cleaned/emptied only during gross removal of asbestos and/or equipment demolition. No HEPA vacuums shall be cleaned/emptied, or opened for any other reason, during final cleaning and/or encapsulation.
- .08 AFDs and all other supplies and equipment shall arrive at the project site in good condition and free of any visual residual asbestos contamination.
- .09 Assure HVAC systems associated with, or that pass through any abatement work areas are shut down. Provide appropriate lock and tag out devices at the shut off point of the fan.

- .10 De-energize the work areas and all conduit running through the work areas.
 - **a.** Appropriate lock and tag out devices shall be installed at the breakers.
 - **b.** The AAC shall provide a temporary electric panel with ground fault interruption.
 - **c.** The AAC shall supply sufficient temporary lighting to illuminate the work areas during asbestos abatement and paint stabilization. All active work areas shall be lighted to not less than the minimum illumination intensities listed in OSHA Regulation 29 CFR 1926.56(a), Table D-3 for Indoors: warehouses, corridors, hallways, and exit ways (e.g. 5-foot candles).
- .11 Only approved noncombustible or flame-resistant materials shall be used for work area preparation. Polyethylene sheeting shall be certified to conform to NFPA 701.
- .12 The dropping, lowering, transporting or otherwise moving any open or packaged waste through any shaft during this project is strictly prohibited. When the asbestos abatement work area IS a shaft, asbestos waste must be packaged and lowered in a controlled fashion to the base of the shaft. No dropping of waste in any shaft shall be permitted at any time.

15.00 - PREPARATION & ABATEMENT - PIPE/PIPE FITTING INSULATION

- .01 This section is intended to specify the acceptable friable methods for the removal of pipe/pipe fitting insulation using glove-bags.
 - **a.** A minimum of two (2) workers are required to perform pipe/pipe fitting insulation removal using glove-bag procedures.
 - **b.** pipe/pipe fitting insulation present inside floor/ceiling pipe penetrations within any given work area shall be removed as part of this project.
- .02 All building occupants shall be removed from the work area floors during the performance of the removal project, unless access to the work area is restricted by an isolation barrier or lockable doors.
 - **a.** If required, wooden isolation barriers shall be erected to completely isolate the work area from any occupied areas of the building.
 - 1. Isolation barriers shall be eight (8) feet high and shall be constructed of minimum ³/₈" fire-rated plywood supported by 2'x'3' stud framing, or equivalent, placed on sixteen-inch (16") centerlines. Appropriate footings and bracings shall be installed to provide proper support.
- .03 Approved high quality HEPA equipped air filtration devices (AFDs) shall be placed so as to develop and hold a negative differential air pressure. Each AFD shall be equipped with a magnehelic gauge or manometer to measure pressure drop across the filters, indicating overload and a need to change filters. An automatic shutdown system shall be provided in the event of improper filter fit, a rupture in the HEPA filter, or a blocked air discharge.
- .04 Pre-clean the floor and horizontal surfaces via wet wipe and HEPA vacuum techniques.
 - **a.** All fixed objects shall be wet wiped and sealed with one (1) layer of six (6) mil polyethylene.
- .05 Install critical barriers consisting of one (1) layer of six-mil polyethylene over all windows, doors, openings between walls and ceilings, and any other critical openings inside the work area such that the work area is isolated from the rest of the building.
 - **a.** Ensure all electrical panels, control panels, and control boxes are protected with watertight critical barriers consisting of one (1) layer of six-mil polyethylene.
 - **b.** Areas where critical barriers are to be installed shall first be pre-cleaned via wet wipe and HEPA vacuum techniques.

- .06 Should the AAC chose to limit the size of each work area to the immediate spaces adjacent to the pipe/pipe fitting insulation to be removed, the AAC may construct a tent containment as specified below. If the AAC chooses not to utilize tent containments to limit the size of the work areas, the entire room/area containing the pipe/pipe fitting insulation to be removed must be considered part of the work area, and is subject to pre-cleaning, polyethylene protective sheeting for all non-movable items, decontamination, and final clearance testing as specified in other paragraphs in this Section.
 - **a.** Erect wall coverings, completely enclosing and isolating the pipe/pipe fitting insulation removal locations using two (2) layers of six (6) mil polyethylene sheeting. Remove suspended ceiling tiles as required to extend the wall coverings to the plaster ceilings above.
 - **b.** Tape one (1) layer of six (6) mil polyethylene sheeting to the floors, extending at least five (5) feet from the pipe/pipe fitting insulation to be removed.
 - **c.** All fixed, unmovable objects to be enclosed in the tent containment shall be precleaned and sealed with one (1) layer of six (6) mil polyethylene sheeting.
 - **d.** Polyethylene sheeting shall be installed in such a manner as to cause minimal damage to underlying surfaces. The AAC shall ensure proper adhesion of the sheeting to problem areas, such as walls with peeling paint.
 - **e.** Approved high quality HEPA equipped air filtration devices (AFDs) shall be placed so as to develop and hold a negative differential air pressure.
 - 1. The AFD exhaust shall be vented outside of the building, or tent containment.
- .07 Construct and attach a decontamination unit at the work area entrance. Refer to *Section* 13.00 *Decontamination Facilities*. Exact placement shall be at the discretion of the AAC, with approval from the on-site API.
- .08 Upon completion of the work area preparation, and approval by the on-site API, install containment bags (glove bags) around the pipe/pipe fitting insulation to be removed, in accordance with the ACR Section VI.C.3.e.2-5. The containment bag, once attached, shall be smoke tested using a smoke tube and aspirator bulb. The containment bags shall be utilized in order to further contain any airborne asbestos fibers released during the removal tasks and simplify the subsequent final cleaning tasks.
 - **a.** Pipe insulation covered with metal jacketing shall first require the removal of the metal jacket using appropriate tin snips.
 - **b.** The pipe insulation diameter worked shall not exceed one-half of the bag working length above the attached gloves.
 - **c.** These bags are for single use and shall not be repositioned.
 - **d.** Polyethylene sheeting shall be applied to the work area floors beneath the pipe/pipe fitting insulation to be removed, extending a minimum of five (5) feet in all directions or to the full extent of the floor space included in the tent containment, whichever is larger.

- **.09** Removal of pipe/pipe fitting insulation shall be initiated only after the material has been treated with a solution of water and wetting agent.
 - **a.** At the start of each work day, the material to be removed shall be wetted. This wetting shall be repeated at such intervals as to prevent the insulation from drying out.
 - 1. Continually mist the air with water using an airless sprayer to keep airborne fiber levels to a minimum.
 - 2. No standing water shall be tolerated inside of the work area. Standing water would have the potential of leaking to spaces below the work area. The AAC shall designate a worker to constantly monitor the work area and vacuum or mop up any standing water resulting from the pre-wetting or air misting procedures.
 - 3. All wastewater generated in the decontamination chamber shower shall be retrieved and added to packaged asbestos waste materials or pumped through a five (5) micron filter element prior to discharging it to the sanitary sewer or floor drains.
 - 4. All wastewater generated in the abatement work area shall be retrieved and added to packaged asbestos waste materials and/or placed in plastic lined leak-tight drums for disposal in accordance with VI.C.7 of the Asbestos Control Regulation.
 - **b.** All removed ACM must be placed in asbestos waste containers simultaneously with their removal. Removed ACMs shall not be permitted to accumulate in the work area, and shall be completely contained in proper asbestos waste containers, ready for disposal, before the end of each shift.
 - **c.** ACM removed at a height shall be bagged at that time or lowered to the ground in a controlled manner and then bagged. No dropping of ACM shall be permitted.
- .10 Perform removal of the pipe/pipe fitting insulation using the containment-bag technique. Containment bag removal practices shall conform to the ACR Section VI.C.3.e.7-20.
- .11 Prior to removing the glove bag, any residue shall be removed using a stiff nylon brush or a scraper. The pipe surfaces shall then be wet wiped to remove any visible debris. The API shall conduct a visual inspection and approve encapsulation when no visible dust or debris is evident on pipe surfaces.
- .12 Upon approval by the API, encapsulate the pipe surfaces prior to removing the containment bag. The API shall inspect the sealant/encapsulant to confirm adequate and proper application and approve subsequent removal of the glove bag(s). When acceptable, the API shall approve the removal of the glove-bag.
 - **a.** A HEPA vacuum shall be used to collapse the glove-bag prior to removal.
- .13 The AAC shall clean all surfaces in the work area using wet-wipe and HEPA-vacuum techniques.

- .14 During the performance of final cleaning of all surfaces inside the active abatement work area, all horizontal surfaces "outside the work area" shall also be cleaned. This includes the dirty, shower and clean rooms of decontamination chambers attached to the asbestos abatement work area being tested and all immediate surroundings of representative makeup air entering each independent asbestos abatement work area being tested.
 - **a.** Remove all bulk trash and/or large construction debris items from the area.
 - **b.** Wet bulk piles of debris with a fine water mister or "Hudson" sprayer.
 - 1. Pick up large pieces by hand and/or shovel and place into asbestos waste bags. Broom sweeping is not permitted at any time on any asbestos abatement project.
 - **c.** Any residues shall be removed using a stiff nylon brush or scraper.
 - **d.** Floors, walls, ceilings, critical and containment barriers shall be swept with the exhaust of an electric leaf blower to dislodge any remaining dust within the asbestos abatement work area. Allow for the HEPA equipped air filtration devices (AFDs) to provide several air changes within the work area prior to vacuuming and wet wiping.
 - **e.** Surfaces shall then be HEPA vacuumed and/or wet wiped to remove any visible debris.
- .15 Upon completion of cleaning activities, the API shall inspect the sealant/encapsulant to confirm adequate and proper application.
- .16 The API shall conduct a detailed final inspection to ensure that no visible dust or debris remains on any surfaces. If any suspect or objectionable material is evident, the AAC shall clean the material and sufficient surrounding areas to the satisfaction of the API, via wetwipe and HEPA-vacuum techniques.
- .17 Upon completion of removal, cleaning, encapsulation, and an acceptable visual inspection, final clearance samples shall be collected and analyzed. Refer to *Section 9.00 Air Monitoring by the Owner*.
- .18 If <u>any</u> of the results of clearance samples are unacceptable according to the Philadelphia ACR and AHERA, the AAC shall re-clean the work area via wet-wipe and HEPA-vacuum techniques. Following an acceptable inspection, the API shall re-test the area. This sequence shall be repeated until receipt of acceptable air sample results according to the Philadelphia ACR and AHERA.
- .19 Upon receipt of acceptable final visual inspections and acceptable air sample clearance results according to the Philadelphia ACR and AHERA, the AAC shall carefully dismantle critical barriers, plastic sheeting, tape and other materials used in the work area construction. These materials shall be disposed of in sealable plastic bags as asbestos contaminated waste. Refer to Section 19.00 ACM Waste Disposal.
- .20 The AAC shall remove all glue and tape adhesive reside from all walls, floors and all other surfaces in which glue and tape were utilized in containment preparations. The API shall conduct a post teardown inspection to ensure this task has been completed.

16.00 PREPARATION & ABATEMENT - FLOOR TILE - NON-FRIABLE PROJECTS

- .01 This section shall apply to the non-friable removal of vinyl floor tile as listed in Section 1.09. Removal of vinyl floor tile shall be performed using infra-red heat machines or dryice. If it is apparent the AAC cannot remove the floor tile in a non-friable manner, the API will stop work and all requirements of a friable project will be implemented at no additional cost to the Owner.
- .02 The AAC shall assure that exits from the building are not obstructed and that appropriate safety barriers are established to prevent access to the work area by unauthorized persons. The work areas are to be kept neat, clean, and safe.
- .03 Only approved noncombustible or flame-resistant materials shall be used in the construction of temporary enclosures. Polyethylene sheeting to be used shall be certified to conform to NFPA 701.
- .04 Post OSHA specified, asbestos specific danger signs at the entrance to the work area. Such signs shall also be posted when applicable to decons, bagout chambers, critical and separation barriers, and waste storage containers.
- .05 The AAC shall confine their equipment, the storage of materials, tools, supplies, and the activities of their workmen to the limits established by the Owner and local ordinances.
- **.06** Assure any HVAC systems associated with or which course through any work area are sealed, shut down and locked out.
- .07 The AAC shall de-energize the work area and all conduit running through the work area, if possible.
 - **a.** Appropriate lock and tag out devices shall be installed at the circuit breakers.
 - **b.** All conduit that cannot be de-energized shall be wrapped with a minimum of one (1) layer of six (6) mil polyethylene sheeting.
 - 1. Suspend OSHA approved, electrical voltage and shock hazard warning tags from the energized conduit traveling through the work area every six feet. The warning tags shall remain in place for the duration of the abatement project.
 - **c.** The AAC shall provide a temporary electrical panel board with ground fault interruption. All electrical power shall be brought into the work area via ground fault interrupters (GFIs).
 - **d.** The AAC shall supply sufficient temporary lighting to illuminate the work area during abatement.
- .08 Install an approved high quality HEPA equipped air filtration devices (AFDs) so as to develop and hold a negative differential air pressure. The AFD exhaust shall be vented outside of the building.
- .09 Construct and attach a decontamination unit at the work area entrance. Refer to *Section* 13.00 *Decontamination Facilities*. Exact placement shall be at the discretion of the AAC, with approval from the on-site API.

- .10 Install critical barriers consisting of one (1) layer of six-mil polyethylene over all windows, doors, HVAC ducts and any other critical openings inside the work area such that the work area is isolated from the rest of the building. Areas where critical barriers are to be installed shall first be pre-cleaned via wet wipe and HEPA vacuum techniques.
- .11 Upon completion of preparation of the work area and approval by the API, perform removal of the floor tile, using the appropriate non-friable method to facilitate non-friable removal. Tiles shall be removed and placed into waste containers in as complete sections as possible to minimize the release of asbestos fibers and dust.
 - **a.** Remove all binding strips or other restrictive moldings holding floor tile at locations such as doorways, walls, thresholds, etc...
 - **b.** Using the appropriate non-friable method to loosen the tile's adhesion to the substrate, wedge a scraper beneath the edge of the floor tile and lift the tile intact to minimize the release of asbestos fibers and dust.
 - **c.** Crews shall be structured such that tiles are packaged as they are removed. Removed floor tile shall not be permitted to accumulate in the work area, and shall be completely contained in proper asbestos waste containers, without further breakage, ready for disposal, before the end of each shift.
- .12 If it is apparent the AAC cannot remove the tiles in a non-friable manner without breakage, work will be stopped by the API and all requirements of a friable project will be implemented, as per ACR Section V1.
 - **a.** The removal of floor tile mastic is not addressed in this specification, and is not included in this contract's scope of work.
- .14 Upon completion of all floor tile, perform final cleaning of the work area. AFDs shall remain in operation during this procedure.
- During the performance of final cleaning of all surfaces inside the active abatement work area, all horizontal surfaces "outside the work area" shall also be cleaned. This includes the dirty, shower and clean rooms of decontamination chambers attached to the asbestos abatement work area being tested and all immediate surroundings of representative makeup air entering each independent asbestos abatement work area being tested.
 - **a.** Remove all bulk trash and/or large construction debris items from the area.
 - **b.** Wet bulk piles of debris with a fine water mister or "Hudson" sprayer.
 - 1. Pick up large pieces by hand and/or shovel and place into asbestos waste bags. Broom sweeping is not permitted at any time on any asbestos abatement project.
 - **c.** Any residues shall be removed using a stiff nylon brush or scraper.
 - **d.** Floors, walls, ceilings, critical and containment barriers shall be swept with the exhaust of an electric leaf blower to dislodge any remaining dust within the asbestos abatement work area. Allow for the HEPA equipped air filtration devices (AFDs) to provide several air changes within the work area prior to vacuuming and wet wiping.
 - **e.** Surfaces shall then be HEPA vacuumed and/or wet wiped to remove any visible debris.

- .16 The API shall conduct a detailed final inspection to ensure that no visible dust or ACM debris (tile chips, dust) remains on any surfaces.
- .17 The floor surface need not be encapsulated, as some replacement tile/mastic system manufacturers instructions preclude the use of an encapsulant in order to ensure proper adhesive performance.
- .18 Upon completion of removal, cleaning, and an acceptable visual inspection, final clearance samples shall be collected and analyzed. Refer to Section 9.00 Air Monitoring by the Owner.
- .19 Upon acceptable final visual inspections and clearance air sample results, all materials used in the work area containment shall be carefully dismantled and disposed in sealable plastic bags as asbestos contaminated waste. Refer to Section 19.00 ACM Waste Disposal.

17.00 - PREPARATION & ABATEMENT - BLACK/TACK BOARD GLUE DOTS - NON-FRIABLE PROJECTS

- .01 This section is intended to specify the acceptable methods for non-friable removal of assumed asbestos containing glue adhesive behind blackboards and tack boards as listed in *Section 1.09*.
 - **a.** Glue-dot adhesive is classified as a non-friable Category I material. The removal shall be performed as a non-friable project. Only methods that remove the glue-dots intact are permitted. The use of any equipment that may sand, grind, saw, or abrade the material is prohibited.
 - **b.** If the on-site API deems the work as friable, work shall be halted and the project shall proceed in accordance with full containment protocols, as per ACR Section V1.
- .02 Install an approved high quality HEPA equipped air filtration devices (AFDs) so as to develop and hold a negative differential air pressure. The AFD exhaust shall be vented outside of the building.
- .03 Construct and attach a decontamination unit at the work area entrance. Refer to *Section* 13.00 *Decontamination Facilities*. Exact placement shall be at the discretion of the AAC, with approval from the on-site API.
- .04 Install floor coverings consisting of one (1) layer of six (6) mil polyethylene beneath the blackboards/tack boards, extending at least five (5) feet in all directions.
- **.05** Begin the non-friable removal of glue dots.
 - **a.** Carefully remove the blackboards/tack boards and glue dots.
 - 1. Unfasten the blackboards/tack boards from the wall, remove, and:
 - **a.** If glue dot adhesive is adhering to the backside of the blackboards/tack boards, wrap the boards in two (2) layers of six (6) mil polyethylene sheeting, sealed with tape and dispose as asbestos contaminated waste.
 - b. If glue dot adhesive is not adhering to the backside of the blackboards/tack boards or if it has been determined by the onsite API that all glue dots have all been removed from the boards, dispose of the boards as ordinary construction waste.
 - **2.** Removal of the glue-dots from the wall and from behind the black/tack boards may be performed by the following methods:
 - **a.** Mechanical removal using hammer and flat-bladed scraper/screwdriver.
 - b. Heat removal using heat-gun or open-flame propane torch. Open flame shall be used only to soften glue-dots sufficiently for removal no ignition or singeing of dots shall be permitted. Adequate ventilation shall be ensured at all times. Ensure that fire protection procedures are complied with.
 - **c.** Other methods must be submitted and demonstrated for approval.

- 3. After removal of the glue-dots from the wall and from behind the black/tack boards, clean all residue from surfaces and fastener holes, as well as any debris fallen onto the polyethylene sheeting, utilizing wetwiping and HEPA vacuum techniques. AFDs shall remain in operation during this procedure.
- .06 During the performance of final cleaning of all surfaces inside the active abatement work area, all horizontal surfaces "outside the work area" shall also be cleaned. This includes the dirty, shower and clean rooms of decontamination chambers attached to the asbestos abatement work area being tested and all immediate surroundings of representative makeup air entering each independent asbestos abatement work area being tested.
 - **a.** Remove all bulk trash and/or large construction debris items from the area.
 - **b.** Wet bulk piles of debris with a fine water mister or "Hudson" sprayer.
 - 1. Pick up large pieces by hand and/or shovel and place into asbestos waste bags. Broom sweeping is not permitted at any time on any asbestos abatement project.
 - **c.** Any residues shall be removed using a stiff nylon brush or scraper.
 - **d.** Floors, walls, ceilings, critical and containment barriers shall be swept with the exhaust of an electric leaf blower to dislodge any remaining dust within the asbestos abatement work area. Allow for the HEPA equipped air filtration devices (AFDs) to provide several air changes within the work area prior to vacuuming and wet wiping.
 - **e.** Surfaces shall then be HEPA vacuumed and/or wet wiped to remove any visible debris.
- .07 The API shall perform a work area inspection to ensure no debris exists in the work area and that all asbestos waste has been properly removed and sealed in double bags.
- **.08** Upon completion of removal, cleaning, encapsulation, and an acceptable visual inspection, final clearance samples shall be collected and analyzed. Refer to *Section 9.00 Air Monitoring by the Owner*.
- .09 Upon acceptable final visual inspections and clearance air sample results, all materials used in the work area containment shall be carefully dismantled and disposed in sealable plastic bags as asbestos contaminated waste. Refer to Section 19.00 ACM Waste Disposal.

18.00 - PREPARATION & ABATEMENT - TRANSITE TABLE TOP AND STAINLESS-STEEL SINK WITH UNDERCOAT MASTIC - NON-FRIABLE PROJECTS

- .01 This section is intended to specify the acceptable methods for non-friable removal of the transite demonstration table top and stainless-steel sink with undercoat mastic as listed in *Section 1.09*
- .02. These materials are classified as non-friable Category II materials. The removal of these materials shall be performed as non-regulated non-friable projects. Only methods that remove the materials intact are permitted. The use of any equipment that may sand, grind, saw, or abrade the materials is prohibited.
- .03 Delineate and restrict the work area(s) using asbestos specific barrier tape and asbestos specific danger signs. The AAC shall assure that appropriate safety barriers are established to prevent access to the work area by unauthorized persons. The work areas are to be kept neat, clean, and safe.
- .04 Install floor coverings consisting of one (1) layer of six (6) mil polyethylene beneath the material to be removed, extending at least five (5) feet in all directions.
- .05 Carefully remove all anchoring systems (screws, bolts, adhesive, etc.) holding the materials in place. Spray the panels with amended water before and during removal activities, to wet the materials and minimize creation of dust.
- .06 When all fasteners are removed, carefully remove the intact panel and sink sections. The sections shall carefully be placed onto a sheet of polyethylene and wrapped securely with two (2) layers of six (6) mil polyethylene sheeting. Seams shall be sealed with tape. Apply labels to the wrapped panels and dispose of as asbestos waste.
- .07 After removal of the panel and sink sections, clean all residue from surfaces and fastener holes using HEPA-vacuum and wet-wipe techniques, as well as any debris fallen onto the polyethylene sheeting below.
- .08 Carefully roll up the polyethylene sheeting. Place the rolled polyethylene sheeting into appropriate asbestos waste containers. All wrapped panels and polyethylene sheeting shall be disposed of as asbestos waste in accordance with *Section 19.00 ACM Waste Disposal*.
- **.09** Upon conclusion of removal and cleaning, a visual inspection shall be made by the API to ensure completeness of the removal.
- .10 Upon completion of removal, cleaning and an acceptable visual inspection, final clearance samples shall be collected and analyzed. Refer to Section 9.00 Air Monitoring by the Owner.

19.00 ACM WASTE DISPOSAL

- .01 The dropping, lowering, transporting or otherwise moving any open or packaged waste through any shaft during this project is strictly prohibited! When the asbestos abatement work area IS a shaft, asbestos waste must be packaged and lowered in a controlled fashion to the base of the shaft. No dropping of waste in any shaft shall be permitted at any time.
- Approval must be obtained from the API prior for temporary storage of any asbestos waste containers or construction debris on site, prior to being loaded into appropriate dumpsters. The waste shall be appropriately packaged according to the type of waste. A polyethylene drop cloth and covering shall be provided and the storage areas restricted by barrier tape and appropriate signage. Asbestos waste containers must be distinctly stored separately from other waste. No long-term storage may occur in these areas.
- .03 The loading, transportation, and disposal of asbestos waste at the landfill shall occur in accordance with regulatory requirements of NESHAPS and applicable state and local guidelines and regulations.
- .04 Waste disposal containers shall conform to one of the following. Waste with sharp edges shall not be disposed of solely in polyethylene bags. All six-mil polyethylene bags shall be transparent so that when filled, the contents of the bag are readily visible.
 - **a.** Two (2) six-mil polyethylene bags, one placed inside the other, separately sealed. The bags shall be carefully closed to minimize dead air space and taped shut.
 - 1. Six-mil polyethylene disposal bags containing asbestos and asbestos contaminated materials shall be placed into a second six-mil polyethylene bag inside an approved bag-out chamber or decontamination chamber while being removed from the work area. The second bag shall not be applied inside the work area.
 - **b.** Material first shall be placed into burlap bags or equivalent to prevent edges/corners from tearing or penetrating polyethylene waste bags. The encased material may then be placed in two (2) six mil polyethylene bags, as per *Subsection a* above.
 - **c.** One (1) six mil polyethylene sealed bag inside an air and water tight drum.
- .05 The AAC shall label asbestos waste with the name of the generator and the location from which the waste was generated.
- .06 The container used for transporting and disposing of ACM waste shall be clearly and properly labeled as specified in EPA and DOT regulations. In addition to generator labels, containers must carry the following labels:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

-and-

DOT labels requirement: (Easily readable in sharp relief)

CAUTION

Contains Asbestos Fibers
Avoid Opening or Breaking Container
Breathing Asbestos is Hazardous
to your Health
RQ ASBESTOS
9,NA2212,PG III
(ASBESTOS)

- **.07** During waste load out, post asbestos specific danger signs along the waste disposal route, and on and around the vehicle or dumpster being used to transport the waste off site.
 - a. Polyethylene drop cloths shall be utilized along routes in which bagged ACM waste is passed through the building. Proposed waste removal route shall be presented to the API and Asbestos Project Manager/Designer for approval prior to performing delivery of asbestos waste material to the intended waste container. The API must document the proposed route and the APIs subsequent approval in an activity log.
- .08 Waste routes must be approved by the Owner and on-site API prior to the commencement of work. All waste being transported through the building must be placed in covered/enclosed containers bearing proper warning signs. The waste route must be kept clean.
 - **a.** The rolling of waste drums or the dropping of waste bags down stairs is strictly prohibited!
 - **b.** After transport of waste through the building is completed, the AAC shall wet mop the waste removal route to assure continued cleanliness and removal of any debris associated with the waste transport tasks.
- .09 All documentation of transportation and disposal transactions such as dump receipts, trip tickets and waste manifests shall be completed and delivered to the Owner for their records.
- .10 Should the Owner not receive a receipt of the waste shipment record within 35 days, the Owner shall contact the AAC to determine the status/disposition of the waste.
- .11 Should the Owner not receive a receipt of the waste shipment record within 45 days, the Owner shall notify the EPA.

20.00 - LEAD BASED PAINT STABILIZATION

- Lead based paint (LBP) is assumed present on all painted surfaces throughout the building (i.e. walls, ceilings, pipework, ductwork, etc.). All renovation work, paint stabilization, and all other activities that impact painted surfaces shall be performed in accordance with the EPA Renovation, Repair, and Painting (RRP) rule under the Toxic Substances Control Act.
 - **a.** This includes all painted surfaces throughout the specified work areas.
 - **b.** Refer to the Architectural Floor Plans for approximate dimensions of work areas and surfaces/equipment to receive paint stabilization and repainting.
- .02 Renovation work will involve scraping of loose and flaking paint from walls, ceilings and other surfaces, repairing of wall and ceiling plaster damage, and repainting. This section is intended to specify the acceptable methods for the stabilization of all painted surfaces throughout the building.
- All moveable objects shall be removed from the work area. Movable objects shall be wet wiped & HEPA vacuumed prior to their relocation to a clean area.
- .04 Cover the floor surface surfaces with taped-down polyethylene sheeting ten (10) feet from the area of paint disturbance or a sufficient distance to contain the dust, whichever is greater. If a vertical containment system is constructed, the floor covering may stop at the vertical barrier, providing the barrier extends from floor to ceiling and is tightly sealed at floors, ceilings, and walls.
- .05 Close all windows and doors in the work area.
- **.06** Construct an airlock at the entrance to the work area. The airlock consists of two sheets of polyethylene sheeting.
 - **a.** One sheet is completely taped along all four edges. The polyethylene sheeting is then cut down the middle.
 - **b.** The second sheet is only taped along the top and acts as a flap covering the slit in the first sheet of plastic.
- .07 Install tack-pads at all paint stabilization work area entrances and exits that are adjacent to areas occupied by other trades and school occupants.
- .08 De-energize all HVAC present in the work area or which pass through the work area. Close and cover all ducts openings in the work area with polyethylene sheeting.
- .09 Unauthorized persons must be prevented from entering the active work area by posting warning signs and by establishing barriers around the work area.
 - a. post signs clearly defining the work area and warning occupants and other persons not involved in renovation activities to remain outside of the work area. These signs should be in the primary language of the occupants and should say "Warning Lead Work Area" and "Poison, No Smoking or Eating."
 - **b.** Utilize barrier tape in large areas and polyethylene sheeting on doorways.

- Supply sufficient temporary lighting to illuminate the work area during paint removal and encapsulation (repainting). All electrical power shall be brought into the work areas from a temporary electric panel with ground fault interruption.
 - a. Sufficient lighting means all active work areas shall be lighted to not less than the minimum illumination intensities listed in OSHA Regulation 29 CFR 1926.56(a), Table D-3 for Indoors: warehouses, corridors, hallways, and exit ways (e.g. 5-foot candles).
- .11 Workers shall wear protective clothing including Tyvek suits, gloves and (minimum) NIOSH-certified disposable respirators with a HEPA (High-Efficiency Particulate Air) filter (N-100, R-100, or P-100) during paint stabilization operations.
- .12 Manually remove loose, flaking, peeling, and non-adhering paint only after misting with water. Remaining paint edges should be feathered.
 - **a.** All paint chips and dust shall be in packaged in polyethylene bags or water tight drums as removal occurs. No accumulations of removed paint shall be permitted to remain in the work area.
 - **b.** Before and during manual paint scraping, spray water on painted surfaces to keep dust from spreading (referred to as wet-scraping). Sanding, drilling and cutting into lead-based paint are prohibited.
- .13 Removal of ceiling tiles littered with paint chips:

Lay plastic sheeting on the floor beneath the ceiling tiles to be removed extending at least ten (10) feet beyond the extents of removal. Carefully remove the ceiling tiles. While standing on the plastic sheeting, turn the ceiling tiles on their side and shake to allow settled plaster and paint chips to fall onto the sheeting below. Plastic sheeting may be moved and reused within a specific room. Once all ceiling tiles are removed and the paint chips emptied onto the sheeting, the sheeting shall be carefully rolled up for disposal.

- **.14** Surfaces shall be HEPA- vacuumed to remove residual paint and dust. Any remaining paint shall be sound and exhibiting good adherence.
- .15 Utilize two buckets to fine clean the surfaces in which lead based paint was removed.
 - **a.** One bucket containing a trisodium phosphate (TSP) based cleaning solution and the other bucket for rinsing.
 - **b.** Change the rinse water frequently and replace rags, sponges, and mop heads often.
- **.16** Repaint all surfaces as per manufacturer's recommendations.
 - **a.** Refer to the Architectural Specifications for new paint product requirements.
- .17 Perform a final cleaning of all surfaces utilizing HEPA vacuum and wet wiping techniques.

- .18 Mist the polyethylene sheeting floor coverings before folding it dirty side inward. Sheeting used to isolate contaminated rooms from non-contaminated rooms must remain in place until after the cleaning and removal of other sheeting.
- .19 The work area should be left clean at the end of every day and must be cleaned thoroughly at the end of the job. The area must be completely free of dust and debris.
 - **a.** Ensure that all personnel, tools, and other items, including the exteriors of containers of waste, are free of dust and debris before leaving the work area.
 - **b.** All paint chips, dust and materials used in the construction of the containment shall be packaged in polyethylene bags or water tight drums prior to leaving the work area.
- .20 Upon receipt of an acceptable final visual inspection, carefully dismantle materials used in the work area containment.
- .21 Removed lead-based paint and materials used in containment shall be disposed of in accordance with the Hazardous and Universal Waste Disposal Regulations set forth by the Resource Conservation and Recovery Act (RCRA); 40 CFR 260-299.

21.00 RE-INSULATION OF PIPES

.01 Re-insulate all piping from which abatement occurred with pre-molded fiberglass insulation with a factory applied all service jacket (ASJ SSL). Work shall be in accordance with the manufacturer's recommendations.

NOTE: Re-insulation of pipework shall be sub-contracted out to a qualified insulating company. If the AAC elects to perform pipe re-insulation, the AAC must demonstrate they have the necessary personnel, equipment, materials, and experience to complete the project in a satisfactory manner.

- .02 Re-insulate all elbows, valves, and related joints with pre-molded PVC fitting covers with fiberglass inserts of equal thickness to the adjacent pipe insulation.
- .03 Install PVC jacketing on all pipe sections that cross over attic catwalks. The PVC jacketing shall be a thickness of 0.020", white gloss finish, and secured by PVC adhesive. The use of stainless-steel tacks to secure the pipe jacketing is prohibited.
- .04 All piping shall be insulated to a thickness as listed below:

Pipe System	<u>Diameter</u>	<u>Insulation Thickness</u>
cold water	1" and below	1/2"
cold water	1 ¹ / ₄ " and above	1"
hot water	1" and below	1/2"
hot water	1 ¹ / ₄ " and above	1"
condensate or returns	1" and below	1"
condensate or returns	11/4" to 2"	11/2"
condensate or returns	21/4" and above	2"
steam	1" and below	1"
steam	11/4" to 2"	11/2"
steam	21/4" to 8"	2"
steam	8" and above	3½"

22.00 PROJECT CLOSEOUT

- .01 After achieving acceptable air sample clearance and dismantling the work area, the AAC shall be released after the following items are completed:
 - **a.** Removal of all temporary signs, labels, tape and glue/tape adhesive residue.
 - **b.** Removal of all temporary devices, facilities, and equipment.
 - **c.** Cleaning the project site and storage areas of trash, etc.
 - **d.** Replacement/repair of any damage.
 - **e.** SDP deems the repair work (if any) is acceptable for re-occupancy.
 - **f.** Removal of all waste containers (asbestos, scrap, and construction debris) from site and proper disposal of waste.
- .02 Upon completion of the project, the AAC shall submit final documentation to the Owner, including but not limited to, all waste handling/shipping documentation/manifests.

END OF SPECIFICATION

ATTO STATE OF THE OF TH	City of Philadelphia - Department of Public Health Air Management Services, 2nd Fl. Asbestos Control Unit 321 University Ave. Philadelphia, PA 19104
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•	Date Received L&I:	Date Received AMS:
	Date Inspected	Inspector No.

Asbestos Inspection Report

11. Signature of Certified Asbestos Investigator:

1. Name of Building / Property:		Addre	ess			
2. Name of Building / Property Owner:		Addre	ess		Phone	No.
3. Name of Philadelphia Certified Investi	gator:	Certif	ication No.	Contact Infor	mation / Email /	Phone No.
L&I Commercial Activity No. (Former	· Business Privilege Lic	cense No.)	Business Tax	ID No.		
4. Name of Philadelphia Licensed Labora	ntory:	Licen	se No.		Phone	No.
5. Scope of Work: (Insert or attach a com result in the disturbance of the identified activities.)						
6. Property has been declared to be in Attached is a copy of the L&I Notice						
7. (ACMs) identified? Yes (List Below)	ow) No (explain)					
8. Suspected ACM's sampled? Yes (attached are copies of t	he laboratory ch	ain of custody	and bulk samp	le results.)	No (Why?)
9. List all identified ACM's located in removed prior to renovation. You (Invest						
Location	Description	Type (Code 1)	Amo Square	Linear	Condition (Code 2)	Action (Code 3)
NF1 - Non-Friable, Cat. 1	Code 2 DD - Deteriorated or Delaminated ID - Non-Damaged	NRN -	Removal neces No removal ne	ode 3 ssary prior to Den cessary, label AC I ACM, removal	M	
10. I hereby certify that the foregoing statem penalties set forth in 18 PA. C.S. S4904 relative requirements of section X of the Asbestos Country and given a copy of this report. If the inspection condition, the building owner has been notified.	ng to unsworn falsification ontrol Regulation (ACR) tion has revealed ACM v	on to authorities. F have been met. T which will be dist	Furthermore I ce The building own urbed by the pr	rtify that the insp ner has been noti oposed work or i	ection, sampling, fied of the ACR f it has revealed	and labeling requirements ACM in bad

Date:

Signature of Building Owner:

Date:

		School District of Philadelphia	Survey Type							
		Asbestos Inspection Report - Section 9		6 Month Surveil	lance					
		Dunbar Elementary School (5250)		Three- Year Reinspe	ection IX					
		1750 N 12th St., Philadelphia, PA 19122		_X_ AIR/EIE						
		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	, 202, 203, 204	l, 205,			
F		Glassiooni modernization i roject	200, 200 & 000							
1 0	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD,	Type (Code 1)	Amount of	SF LF	Condition	Action	Comments/Description/Notes
o r				Non Suspect ACM	(Code 1)	Material	EA	(Code 2)	(Code 3)	·
В	1A	Storage Room 1A	Pipe Fitting Insulation	Confirmed	FRI	20	EA	ND	NRN	
В	1A	Storage Room 1A	Pipe Insulation 2-6 inch	Confirmed	FRI	80	LF	ND	NRN	
В	1A	Storage Room 1A	Fiberglass Pipe Insulation	Non Suspect ACM	х	100	LF	х	х	
В	1A	Storage Room 1A	Cement Floor	Non Suspect ACM	Х	450	SF	х	х	
В	1A	Storage Room 1A	Concrete Block Wall	Non Suspect ACM	Х	1000	SF	х	х	
В	1A	Storage Room 1A	Concrete Block Ceiling	Non Suspect ACM	X	450	SF	х	X	
В	001A	Storage below Stairwell 001A	Terrazzo Floor	Non Suspect ACM	X	240	SF	X	х	
В	001A	Storage below Stairwell 001A	Plaster Wall	NAD	Х	500	SF	Х	х	
В	001A	Storage below Stairwell 001A	Plaster Ceiling	NAD	Х	240	SF	х	х	
В	3	Hallway outside of Girl's Restroom	Pipe Fitting Insulation	Confirmed	FRI	6	EA	ND	NRN	
В	3	Hallway outside of Girl's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	3	LF	ND	NRN	
В	3	Hallway outside of Girl's Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	20	LF	х	х	
В	3	Hallway outside of Girl's Restroom	Cement Floor	Non Suspect ACM	X	400	SF	X	Х	
В	3	Hallway outside of Girl's Restroom	Concrete Block Wall	Non Suspect ACM	Х	800	SF	Х	х	
В	3	Hallway outside of Girl's Restroom	Concrete Block Ceiling	Non Suspect ACM	X	400	SF	X	X	
В	1	Gym Teachers Office	Pipe Fitting Insulation	Confirmed	FRI	20	EA	ND	NRN	
В	1	Gym Teachers Office	Pipe Insulation 2-6 inch	Confirmed	FRI	50	LF	ND	NRN	
В	1	Gym Teachers Office	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	360	SF	ND	NRN	
В	1	Gym Teachers Office	Blackboard Glue Dots	Assumed	NF1	80	SF	ND	NRN	
В	1	Gym Teachers Office	Concrete Block Wall	Non Suspect ACM	X	800	SF	х	х	
В	1	Gym Teachers Office	Concrete Block Ceiling	Non Suspect ACM	X	360	SF	X	X	
В	2	Girl's Restroom	Pipe Fitting Insulation	Confirmed	FRI	15	EA	ND	NRN	
В	2	Girl's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	24	LF	ND	NRN	
В	2	Girl's Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	65	LF	х	x	
В	2	Girl's Restroom	Cement Floor	Non Suspect ACM	X	900	SF	х	х	
В	2	Girl's Restroom	Concrete Block Wall	Non Suspect ACM	Х	1800	SF	Х	х	
В	2	Girl's Restroom	Concrete Block Ceiling	Non Suspect ACM	X	900	SF	Х	Х	
В	2A	Storage Room inside Girl's Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	8	LF	x	х	
В	2A	Storage Room inside Girl's Restroom	Cement Floor	Non Suspect ACM	X	120	SF	Х	х	
В	2A	Storage Room inside Girl's Restroom	Concrete Block Wall	Non Suspect ACM	X	200	SF	X	X	
В	2A	Storage Room inside Girl's Restroom	Concrete Block Ceiling	Non Suspect ACM	Х	120	SF	Х	Х	
В	2B	Girl's Restroom Pipechase accessed from the adjacent Hallway	Cement Floor	Non Suspect ACM	х	100	SF	х	х	
В	2B	Girl's Restroom Pipechase accessed from the adjacent Hallway	Concrete Block Wall	Non Suspect ACM	х	200	SF	х	x	
В	2B	Girl's Restroom Pipechase accessed from the adjacent Hallway	Concrete Block Ceiling	Non Suspect ACM	x	100	SF	x	х	

		School District of Philadelphia		Survey Type						
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		Dunbar Elementary School (5250)		Three- Year Reinsp	ection IX					
		1750 N 12th St., Philadelphia, PA 19122		_X_ AIR/EIE						
		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	l, 202, 203, 20 ₄	4, 205,			
F I o o r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
В	2B	Girl's Restroom Pipechase accessed from the adjacent Hallway	Fiberglass Pipe Insulation	Non Suspect ACM	х	100	LF	х	х	
В	3A	Electrical Room	Pipe Fitting Insulation	Confirmed	FRI	1	EA	ND	NRN	
В	3A	Electrical Room	Pipe Insulation 2-6 inch	Confirmed	FRI	9	LF	ND	NRN	
В	3A	Electrical Room	Transite Electrical Panel	Confirmed	NF2	42	SF	ND	NRN	
В	3A	Electrical Room	Fiberglass Pipe Insulation	Non Suspect ACM	х	30	LF	х	х	
В	3A	Electrical Room	Cement Floor	Non Suspect ACM	Х	120	SF	х	х	
В	3A	Electrical Room	Concrete Block Wall	Non Suspect ACM	Х	250	SF	х	х	
В	3A	Electrical Room	Concrete Block Ceiling	Non Suspect ACM	X	120	SF	X	X	
В	4	Gymnasium	Pipe Fitting Insulation	Confirmed	FRI	32	EA	ND	NRN	
В	4	Gymnasium	Pipe Insulation 2-6 inch	Confirmed	FRI	56	LF	ND	NRN	
В	4	Gymnasium	Wood Floor	Non Suspect ACM	Х Х	4800	SF	X	X	
В	4	Gymnasium	Concrete Block Wall	Non Suspect ACM	X	8000	SF	x	X	
В	4	Gymnasium	Plaster Ceiling	NAD	×	4800	SF	x	X	
В	5	Hallway outside of Boy's Restroom	Pipe Fitting Insulation	Confirmed	FRI	4	EA	ND	NRN	
В	5	Hallway outside of Boy's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	16	LF	ND	NRN	
В	5	Hallway outside of Boy's Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	X	16	LF	x	x	
В	5	Hallway outside of Boy's Restroom	Cement Floor	Non Suspect ACM	Х	450	SF	х	х	
В	5	Hallway outside of Boy's Restroom	Concrete Block Wall	Non Suspect ACM	Х	1000	SF	х	х	
В	5	Hallway outside of Boy's Restroom	Concrete Block Ceiling	Non Suspect ACM	Х	450	SF	х	х	
В	6	Boy's Restroom	Pipe Fitting Insulation	Confirmed	FRI	7	EA	ND	NRN	
В	6	Boy's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	39	LF	ND	NRN	
В	6	Boy's Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	70	LF	x	х	
В	6	Boy's Restroom	Cement Floor	Non Suspect ACM	Х	900	SF	х	х	
В	6	Boy's Restroom	Concrete Block Wall	Non Suspect ACM	X	1800	SF	Х	х	
В	6	Boy's Restroom	Concrete Block Ceiling	Non Suspect ACM	X	900	SF	Х	х	
В	NP-2	Storage Room inside Boy's Restroom	Pipe Fitting Insulation	Confirmed	FRI	18	EA	ND	NRN	
В	NP-2	Storage Room inside Boy's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	30	LF	ND	NRN	
В	NP-2	Storage Room inside Boy's Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	x	30	LF	x	х	
В	NP-2	Storage Room inside Boy's Restroom	Cement Floor	Non Suspect ACM	Х	120	SF	х	х	
В	NP-2	Storage Room inside Boy's Restroom	Concrete Block Wall	Non Suspect ACM	Х	250	SF	х	х	
В	NP-2	Storage Room inside Boy's Restroom	Concrete Block Ceiling	Non Suspect ACM	Х	120	SF	х	х	
В	8	Building Engineer's Office	Pipe Fitting Insulation	Confirmed	FRI	8	EA	ND	NRN	
В	8	Building Engineer's Office	Pipe Insulation 2-6 inch	Confirmed	FRI	22	LF	ND	NRN	
В	8	Building Engineer's Office	Pipe Insulation > 6 inch	Confirmed	FRI	30	LF	ND	NRN	
В	8	Building Engineer's Office	Fiberglass Pipe Insulation	Non Suspect ACM	х	10	LF	х	х	

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		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	, 202, 203, 204	4, 205,			
F I o o r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
В	8	Building Engineer's Office	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	180	SF	ND	NRN	
В	8	Building Engineer's Office	Concrete Block Wall	Non Suspect ACM	Х	250	SF	х	х	
В	8	Building Engineer's Office	Concrete Block Ceiling	Non Suspect ACM	Х	180	SF	х	х	
В	8A	Building Engineer's Office Restroom	Pipe Fitting Insulation	Confirmed	FRI	1	EA	ND	NRN	
В	8A	Building Engineer's Office Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	5	LF	ND	NRN	
В	8A	Building Engineer's Office Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	5	LF	х	х	
В	8A	Building Engineer's Office Restroom	Cement Floor	Non Suspect ACM	Х	30	SF	х	х	
В	8A	Building Engineer's Office Restroom	Plaster Wall	NAD	Х	150	SF	х	х	
В	8A	Building Engineer's Office Restroom	Concrete Block Ceiling	Non Suspect ACM	Х	30	SF	х	х	
В	9	Building Engineer's Office Closet	Pipe Fitting Insulation	Confirmed	FRI	1	EA	ND	NRN	
В	9	Building Engineer's Office Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	16	LF	ND	NRN	
В	9	Building Engineer's Office Closet	Fiberglass Pipe Insulation	Non Suspect ACM	х	60	LF	х	х	
В	9	Building Engineer's Office Closet	Cement Floor	Non Suspect ACM	Х	72	SF	х	х	
В	9	Building Engineer's Office Closet	Plaster Wall	NAD	Х	200	SF	х	х	
В	9	Building Engineer's Office Closet	Concrete Block Ceiling	Non Suspect ACM	Х	72	SF	х	х	
В	NP-1	Storage across from the Old Ash Room	Pipe Fitting Insulation	Confirmed	FRI	11	EA	ND	NRN	
В	NP-1	Storage across from the Old Ash Room	Pipe Insulation 2-6 inch	Confirmed	FRI	23	LF	ND	NRN	
В	NP-1	Storage across from the Old Ash Room	Cement Floor	Non Suspect ACM	х	240	SF	х	х	
В	NP-1	Storage across from the Old Ash Room	Concrete Block Wall	Non Suspect ACM	Х	500	SF	х	x	
В	NP-1	Storage across from the Old Ash Room	Concrete Block Ceiling	Non Suspect ACM	X	240	SF	Х	Х	
В	006A	Pipe Chase inside Storage across Old Ash Room	Fiberglass Pipe Insulation	Non Suspect ACM	х	60	LF	х	x	
В	006A	Pipe Chase inside Storage across Old Ash Room	Cement Floor	Non Suspect ACM	х	90	SF	х	x	
В	006A	Pipe Chase inside Storage across Old Ash Room	Concrete Block Wall	Non Suspect ACM	x	300	SF	х	x	
В	006A	Pipe Chase inside Storage across Old Ash Room	Concrete Block Ceiling	Non Suspect ACM	x	90	SF	x	x	
В	7	Boiler Room	Pipe Fitting Insulation	Confirmed	FRI	50	EA	ND	NRN	
В	7	Boiler Room	Pipe Insulation 2-6 inch	Confirmed	FRI	300	LF	ND	NRN	
В	7	Boiler Room	Pipe Insulation > 6 inch	Confirmed	FRI	80	LF	ND	NRN	
В	7	Boiler Room	Fiberglass Pipe Insulation	Non Suspect ACM	x	300	LF	х	х	
В	7	Boiler Room	Brick Incinerator	Assumed	FRI/NF2	1	EA	ND	NRN	
В	7	Boiler Room	Sectional Boilers	Assumed	FRI/NF2	2	EA	ND	NRN	
В	7	Boiler Room	Cement Floor	Non Suspect ACM	Х	1800	SF	х	х	
В	7	Boiler Room	Concrete Block Wall	Non Suspect ACM	Х	7200	SF	х	х	
В	7	Boiler Room	Concrete Block Ceiling	Non Suspect ACM	Х	1800	SF	Х	X	

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			Interior Renovations in			, 202, 203, 204	4, 205,	İ		
		Classroom Modernization Project	206, 208 & 303	, ,	, ,					
F I o o r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
В	10	Old Ash Storage Room	Pipe Fitting Insulation	Confirmed	FRI	18	EA	ND	NRN	All insulation is at a height of approximately 20'-0"
В	10	Old Ash Storage Room	Pipe Insulation 2-6 inch	Confirmed	FRI	68	LF	ND	NRN	All insulation is at a height of approximately 20'-0"
В	10	Old Ash Storage Room	Fiberglass Pipe Insulation	Non Suspect ACM	x	200	LF	x	x	
В	10	Old Ash Storage Room	Generator Flue Insulation	NAD	x	30	LF	x	x	No Asbestos Detected (Synertech Project No. 010-4368)
В	10	Old Ash Storage Room	Cement Floor	Non Suspect ACM	х	600	SF	х	x	
В	10	Old Ash Storage Room	Concrete Block Wall	Non Suspect ACM	х	2400	SF	х	х	
В	10	Old Ash Storage Room	Brick Wall	Non Suspect ACM	Х	400	SF	Х	х	Smoke Stack Walls
В	10	Old Ash Storage Room	Concrete Block Ceiling	Non Suspect ACM	х	600	SF	х	х	
В	11	Old Coal Storage Room	Pipe Fitting Insulation	Confirmed	FRI	1	EA	ND	NRN	
В	11	Old Coal Storage Room	Pipe Insulation 2-6 inch	Confirmed	FRI	40	LF	ND	NRN	
В	11	Old Coal Storage Room	Fiberglass Pipe Insulation	Non Suspect ACM	х	230	LF	х	х	
В	11	Old Coal Storage Room	Cement Floor	Non Suspect ACM	х	900	SF	х	х	
В	11	Old Coal Storage Room	Concrete Block Wall	Non Suspect ACM	Х	3600	SF	х	х	
В	11	Old Coal Storage Room	Concrete Block Ceiling	Non Suspect ACM	Х	900	SF	х	х	
В	PL	Auditorium Plenum	Cement Floor	Non Suspect ACM	Х	6000	SF	х	х	
В	PL	Auditorium Plenum	Concrete Block Wall	Non Suspect ACM	х	6000	SF	х	х	
В	PL	Auditorium Plenum	Concrete Block Ceiling	Non Suspect ACM	х	6000	SF	х	х	
В	PL	Auditorium Plenum	Pipe Fitting Insulation	Confirmed	FRI	12	EA	ND	NRN	
В	PL	Auditorium Plenum	Pipe Insulation 2-6 inch	Confirmed	FRI	240	LF	ND	NRN	
1	H13	Lobby/Hallway outside Auditorium	Recessed Radiators	Assumed	FRI	20	SF	ND	NRN	
1	H13	Lobby/Hallway outside Auditorium	Terrazzo Floor	Non Suspect ACM	х	620	SF	х	х	
1	H13	Lobby/Hallway outside Auditorium	Plaster Wall	NAD	х	1300	SF	х	х	
1	H13	Lobby/Hallway outside Auditorium	Ceiling Tile 2' x 4'	Non Suspect ACM	х	620	SF	х	х	
1	H13	Lobby/Hallway outside Auditorium	Plaster Ceiling	NAD	х	620	SF	х	х	
1	S16	Stairwell outside of Auditorium	Terrazzo Floor	Non Suspect ACM	Х	450	SF	х	х	
1	S16	Stairwell outside of Auditorium	Plaster Wall	NAD	х	2000	SF	х	х	
1	S16	Stairwell outside of Auditorium	Plaster Ceiling	NAD	х	450	SF	х	х	
1	101D	Principal's Office Restroom	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	40	SF	ND	NRN	
1	101D	Principal's Office Restroom	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	40	SF	ND	NRN	
1	101D	Principal's Office Restroom	Plaster Wall	NAD	Х	100	SF	х	х	
1	101D	Principal's Office Restroom	Plaster Ceiling	NAD	Х	40	SF	х	х	
1	101A	Principal's Office	Pipe Insulation 2-6 inch	Confirmed	FRI	24	LF	ND	NRN	
1	101A	Principal's Office	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	260	SF	ND	NRN	

		School District of Philadelphia		Survey Type						
		Asbestos Inspection Report - Section 9		6 Month Surveil						
		Dunbar Elementary School (5250)		Three- Year Reinsp	ection IX					
		1750 N 12th St., Philadelphia, PA 19122		X AIR/EIE						
		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	, 202, 203, 204	l, 205,			
F		•	·							
	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
1	101A	Principal's Office	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	260	SF	ND	NRN	
1	101A	Principal's Office	Plaster Wall	NAD	Х	500	SF	х	х	
1	101A	Principal's Office	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	260	SF	х	х	
1	101A	Principal's Office	Plaster Ceiling	NAD	Х	260	SF	х	х	
1	101	Main Office	Pipe Fitting Insulation	Confirmed	FRI	1	EA	ND	NRN	
1	101	Main Office	Pipe Insulation 2-6 inch	Confirmed	FRI	2	LF	ND	NRN	
1	101	Main Office	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	260	SF	ND	NRN	
1	101	Main Office	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	260	SF	ND	NRN	
1	101	Main Office	Plaster Wall	NAD	Х	500	SF	х	х	
1	101	Main Office	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	260	SF	х	х	
1	101	Main Office	Plaster Ceiling	NAD	Х	260	SF	х	x	
1	101C	Main Office Closet	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	100	SF	ND	NRN	
1	101C	Main Office Closet	Plaster Wall	NAD	X	200	SF	х	х	
1	101C	Main Office Closet	Plaster Ceiling	NAD	Х	100	SF	х	х	
1	100	Auditorium	Wood Floor	Non Suspect ACM	Х	6000	SF	х	х	
1	100	Auditorium	Plaster Wall	NAD	X	18000	SF	X	х	
1	100	Auditorium	Plaster Ceiling	NAD	X	6000	SF	X	Х	
1	100	Auditorium	Recessed Radiators	Assumed	FRI	150	SF	ND	NRN	
1	100E	Auditorium Stage	Wood Floor	Non Suspect ACM	X	600	SF	Х	х	
1	100E	Auditorium Stage	Plaster Wall	NAD	Х	1800	SF	Х	Х	
1	100E	Auditorium Stage	Plaster Ceiling	NAD	X	600	SF	X	X	
1	100E	Auditorium Stage	Recessed Radiators	Assumed	FRI	40	SF	ND	NRN	
1	100E 100A	Auditorium Stage Vestibule beside Stage along Exterior Wall	Stage Curtain Fiberglass Pipe	NAD Non Suspect ACM	X X	10	EA LF	ND x	NRN x	
1	100A	Vestibule beside Stage along Exterior Wall	Insulation Wood Floor	Non Suspect ACM	X	150	SF	X	X	
1	100A	Vestibule beside Stage along Exterior Wall	Plaster Wall	NAD	X	300	SF	X	X	
1	100A	Vestibule beside Stage along Exterior Wall	Plaster Ceiling	NAD	X	150	SF	X	X	
1	100A	Restroom next to Stage along Exterior Wall	Pipe Insulation 2-6 inch	Confirmed	FRI	24	LF	ND	NRN	
1	100C	Restroom next to Stage along Exterior Wall	Cement Floor	Non Suspect ACM	X	18	SF	X	X	
1	100C	Restroom next to Stage along Exterior Wall	Plaster Wall	NAD	X	100	SF	x	X	
1	100C	Restroom next to Stage along Exterior Wall	Plaster Ceiling	NAD	X	18	SF	x	X	
1	100B	Vestibule beside Stage along Hallway Wall	Wood Floor	Non Suspect ACM	X	150	SF	x	X	
1	100B	Vestibule beside Stage along Hallway Wall	Plaster Wall	NAD	X	300	SF	X	x	
1	100B	Vestibule beside Stage along Hallway Wall	Plaster Ceiling	NAD	X	150	SF	X	x	
1	100D	Restroom next to Stage along Hallway Wall	Pipe Insulation 2-6 inch	Confirmed	FRI	6	LF	ND	NRN	
1	100D	Restroom next to Stage along Hallway Wall	Fiberglass Pipe Insulation	Non Suspect ACM	х	3	LF	х	х	

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		Asbestos Inspection Report - Section 9		6 Month Surveil	llance					
		Dunbar Elementary School (5250)		Three- Year Reinsp	ection IX					
		1750 N 12th St., Philadelphia, PA 19122		X AIR/EIE						
		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E						
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	I, 202, 203, 20 ₄	4, 205,			
F 1 0 0 r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
1	100D	Restroom next to Stage along Hallway Wall	Cement Floor	Non Suspect ACM	Х	15	SF	х	х	
1	100D	Restroom next to Stage along Hallway Wall	Plaster Wall	NAD	Х	100	SF	х	х	
1	100D	Restroom next to Stage along Hallway Wall	Plaster Ceiling	NAD	х	15	SF	х	х	
1	101F	Janitor's Closet	Fiberglass Pipe Insulation	Non Suspect ACM	х	50	LF	х	х	
1	101F	Janitor's Closet	Cement Floor	Non Suspect ACM	х	30	SF	х	х	
1	101F	Janitor's Closet	Plaster Wall	NAD	X	100	SF	X	X	
1	101F	Janitor's Closet	Plaster Ceiling	NAD	X	30	SF	x	X	
1		Closet across from Classroom 102	Cement Floor	Non Suspect ACM	X	120	SF	x	X	
1	101E	Closet across from Classroom 102	Plaster Wall	NAD	X	300	SF	X	X	
1	101E	Closet across from Classroom 102	Plaster Ceiling	NAD	X	120	SF	X	X	
1	102	Classroom 102	Pipe Insulation 2-6 inch	Confirmed	FRI	8	LF	ND	REM	Metal Jacketing may be Present
1	102	Classroom 102	Fiberglass Pipe Insulation	Non Suspect ACM	x	6	LF	x	x	
1	102	Classroom 102	12" x 12" Floor Tile & Mastic	NAD	х	800	SF	х	REM as NAD	No Asbestos Detected in Blue Floor Tile and associated Mastic
1	102	Classroom 102	Blackboard Glue Dots	Assumed	NF1	80	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
1	102	Classroom 102	Plaster Wall	NAD	х	1350	SF	х	х	
1	102	Classroom 102	Wood Partition Wall	Non Suspect ACM	х	250	SF	х	х	
1	102	Classroom 102	Ceiling Tile 2' x 4'	Non Suspect ACM	х	800	SF	х	x	
1	102	Classroom 102	Plaster Ceiling	NAD	X	800	SF	X	X	
1	102A	Coat Closet inside Classroom 102	Floor Tile VAT 9" x 9"	Confirmed	NF1	120	SF	ND	REM	
1	102A	Coat Closet inside Classroom 102	Plaster Wall	NAD	X	240	SF	X	X	
1	102A	Coat Closet inside Classroom 102	Ceiling Tile 2' x 4'	Non Suspect ACM	X	120	SF	X	X	
1	H14	Main Hallway	Pipe Insulation 2-6 inch	Confirmed	FRI	48	LF	ND	NRN	
1	H14	Main Hallway	Terrazzo Floor	Non Suspect ACM	x	2400	SF	X	X	
1	H14	Main Hallway	Plaster Wall	NAD	x	5000	SF	x	X	
1	H14	Main Hallway	Ceiling Tile 2' x 4'	Non Suspect ACM	x	2400	SF	x	X	
1	H14	Main Hallway	Plaster Ceiling	NAD	x	2400	SF	x	X	
1	103	Classroom 103	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
1	103	Classroom 103	Fiberglass Pipe Insulation	Non Suspect ACM	x	8	LF	x	x	
1	103	Classroom 103	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	800	SF	ND	NRN	
1	103	Classroom 103	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	800	SF	ND	NRN	
1	103	Classroom 103	Blackboard Glue Dots	Assumed	NF1	220	SF	ND	NRN	
1	103	Classroom 103	Plaster Wall	NAD	х	1600	SF	х	х	
1	103	Classroom 103	Ceiling Tile 2' x 4'	Non Suspect ACM	х	800	SF	х	х	
1	103	Classroom 103	Plaster Ceiling	NAD	х	800	SF	х	х	

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		Dunbar Elementary School (5250)		Three- Year Reinsp	ection IX					
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		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	l, 202, 203, 20 ₄	4, 205,			
F I O O r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
1	103A	Closet inside Classroom 103	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	50	SF	ND	NRN	
1	103A	Closet inside Classroom 103	Plaster Wall	NAD	Х	150	SF	х	х	
1	103A	Closet inside Classroom 103	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	50	SF	х	х	
1	103B	Restroom inside Classroom 103	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	50	SF	ND	NRN	
1	103B	Restroom inside Classroom 103	Plaster Wall	NAD	Х	150	SF	х	х	
1	103B	Restroom inside Classroom 103	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	50	SF	х	х	
1	104	Lunchroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	12	LF	х	x	
1	104	Lunchroom	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
1	104	Lunchroom	Plaster Wall	NAD	Х	1350	SF	х	х	
1	104	Lunchroom	Wood Partition Wall	Non Suspect ACM	Х	250	SF	х	х	
1	104	Lunchroom	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	х	х	
1	104	Lunchroom	Plaster Ceiling	NAD	X	800	SF	Х	х	
1	104A	Dishwashing Room inside of Lunchroom (Former Coat Closet)	Wood Floor	Non Suspect ACM	x	120	SF	x	x	
1	104A	Dishwashing Room inside of Lunchroom (Former Coat Closet)	Plaster Wall	NAD	х	240	SF	х	х	
1	104A	Dishwashing Room inside of Lunchroom (Former Coat Closet)	Ceiling Tile 2' x 4'	Non Suspect ACM	х	120	SF	х	х	
1	106	Lunchroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	6	LF	х	х	
1	106	Lunchroom	Wood Floor	Non Suspect ACM	х	800	SF	х	х	
1	106	Lunchroom	Blackboard Glue Dots	Assumed	NF1	80	SF	ND	NRN	
1	106	Lunchroom	Plaster Wall	NAD	Х	1600	SF	х	х	
1	106	Lunchroom	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	х	х	
1	106	Lunchroom	Plaster Ceiling	NAD	X	800	SF	X	х	
1	106A	Dry Food Storage inside of Lunchroom	Wood Floor	Non Suspect ACM	X	120	SF	Х	Х	
1	106A	Dry Food Storage inside of Lunchroom	Plaster Wall	NAD	Х	240	SF	Х	Х	
1	106A	Dry Food Storage inside of Lunchroom	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	Х	Х	
1	105	Classroom 105	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	REM	Metal Jacketing may be Present
1	105	Classroom 105	Fiberglass Pipe Insulation	Non Suspect ACM	Х	50	LF	х	x	
1	105	Classroom 105	12" x 12" Floor Tile & Mastic	NAD	x	950	SF	x	REM as NAD	No Asbestos Detected in Grey Floor Tile and associated Mastic
1	105	Classroom 105	Floor Tile VAT 9" x 9"	Confirmed	NF1	950	SF	ND	REM	
1	105	Classroom 105	Blackboard Glue Dots	Assumed	NF1	220	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
1	105	Classroom 105	Plaster Wall	NAD	Х	2000	SF	х	х	
1	105	Classroom 105	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	950	SF	х	х	
1	105	Classroom 105	Plaster Ceiling	NAD	X	950	SF	х	х	

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		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	l, 202, 203, 20 ₄	4, 205,			
F I O O	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
1	105A	Closet inside Classroom 105	12" x 12" Floor Tile & Mastic	NAD	х	50	SF	х	REM as NAD	No Asbestos Detected in Grey Floor Tile and associated Mastic
1	105A	Closet inside Classroom 105	Plaster Wall	NAD	х	150	SF	х	х	
1	105A	Closet inside Classroom 105	Ceiling Tile 2' x 4'	Non Suspect ACM	х	50	SF	х	х	
1	105B	Restroom inside Classroom 105	12" x 12" Floor Tile & Mastic	NAD	х	50	SF	х	REM as NAD	No Asbestos Detected in Blue Floor Tile and associated Mastic
1	105B	Restroom inside Classroom 105	Plaster Wall	NAD	х	150	SF	х	х	
1	105B	Restroom inside Classroom 105	Ceiling Tile 2' x 4'	Non Suspect ACM	х	50	SF	х	х	
1	105D	Pipe Shaft in Hallway outside of Classroom 105	Pipe Insulation > 6 inch	Confirmed	FRI	30	LF	ND	NRN	
1	105D	Pipe Shaft in Hallway outside of Classroom 105	Cement Floor	Non Suspect ACM	х	4	SF	х	х	
1	105D	Pipe Shaft in Hallway outside of Classroom 105	Terra Cotta Wall	Non Suspect ACM	х	30	SF	х	х	
1	105D	Pipe Shaft in Hallway outside of Classroom 105	Concrete Block Ceiling	Non Suspect ACM	х	4	SF	x	х	
1	H15	Hallway between Classrooms 105 and 107	Terrazzo Floor	Non Suspect ACM	х	340	SF	х	х	
1	H15	Hallway between Classrooms 105 and 107	Plaster Wall	NAD	х	700	SF	х	х	
1	H15	Hallway between Classrooms 105 and 107	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	340	SF	Х	х	
1	H15	Hallway between Classrooms 105 and 107	Plaster Ceiling	NAD	X	340	SF	X	х	
1	S12	Stairwell beside Cafeteria	Terrazzo Floor	Non Suspect ACM	X	450	SF	Х	x	
1	S12	Stairwell beside Cafeteria	Plaster Wall	NAD	X	1000	SF	X	x	
1	S12	Stairwell beside Cafeteria	Plaster Ceiling	NAD	X	450	SF	Х	Х	
1	S12	Stairwell beside Cafeteria	Recessed Radiators	Assumed	FRI	20	SF	ND	NRN	
1	107	Kindergarten 107	Pipe Fitting Insulation	Confirmed	FRI	1	EA	ND	REM	
1	107	Kindergarten 107	Pipe Insulation 2-6 inch	Confirmed	FRI	36	LF	ND	REM	Metal Jacketing may be Present
1	107	Kindergarten 107	Fiberglass Pipe Insulation	Non Suspect ACM	x	60	LF	x	x	
1	107	Kindergarten 107	Floor Tile VAT 9" x 9"	Confirmed	NF1	1120	SF	ND	REM	
1	107	Kindergarten 107	Blackboard Glue Dots	Assumed	NF1	140	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
1	107	Kindergarten 107	Plaster Wall	NAD	Х	2000	SF	х	х	
1	107	Kindergarten 107	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	1120	SF	Х	х	
1	107	Kindergarten 107	Plaster Ceiling	NAD	Х	1120	SF	Х	х	
1	107A	Coat Closet inside Classroom 107	Wood Floor	Non Suspect ACM	х	120	SF	х	х	
1	107A	Coat Closet inside Classroom 107	Plaster Wall	NAD	х	240	SF	х	х	
1	107A	Coat Closet inside Classroom 107	Ceiling Tile 2' x 4'	Non Suspect ACM	х	120	SF	Х	Х	
1	107B	Kindergarten 107 Restroom	Pipe Fitting Insulation	Confirmed	FRI	4	EA	ND	REM	
1	107B	Kindergarten 107 Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	20	LF	ND	REM	Metal Jacketing may be Present
1	107B	Kindergarten 107 Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	x	30	LF	x	x	
1	107B	Kindergarten 107 Restroom	Cement Floor	Non Suspect ACM	X	70	SF	X	х	

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		Certification # 0437 Date: 12/31/2018		Bulk Sampling E						
		Certification # 0437 Date: 12/31/2016	Interior Renovations in			1 202 202 20.	1 205	-		
		Classroom Modernization Project	206, 208 & 303	Ciassicollis 102, 105,	107, 100, 201	1, 202, 203, 204	+, 205,			
F		Glassiooni modernization i roject	200, 200 & 000							
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1	107B	Kindergarten 107 Restroom	Plaster Wall	NAD	Х	150	SF	х	х	
1	107B	Kindergarten 107 Restroom	Plaster Ceiling	NAD	Х	70	SF	х	х	
1	107C	Kindergarten Classroom 107 Closet	Pipe Fitting Insulation	Confirmed	FRI	5	EA	ND	REM	
1	107C	Kindergarten Classroom 107 Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	32	LF	ND	REM	Metal Jacketing may be Present
1	107C	Kindergarten Classroom 107 Closet	Wood Floor	Non Suspect ACM	Х	120	SF	х	x	
1	107C	Kindergarten Classroom 107 Closet	Plaster Wall	NAD	х	300	SF	х	х	
1	107C	Kindergarten Classroom 107 Closet	Plaster Ceiling	NAD	Х	120	SF	х	х	
1	108	Classroom 108	Pipe Insulation 2-6 inch	Confirmed	FRI	8	LF	ND	REM	Metal Jacketing may be Present
1	108	Classroom 108	Fiberglass Pipe Insulation	Non Suspect ACM	x	8	LF	x	x	g may be a second
1	108	Classroom 108	12" x 12" Floor Tile & Mastic	NAD	х	800	SF	х	REM as NAD	No Asbestos Detected in Tan Floor Tile and associated Mastic
1	108	Classroom 108	Floor Tile VAT 9" x 9"	Confirmed	NF1	800	SF	ND	REM	
1	108	Classroom 108	Blackboard Glue Dots	Assumed	NF1	160	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
1	108	Classroom 108	Sink Undercoat Mastic	Assumed	NF1	6	SF	ND	REM	1 Sink - 6 SF
1	108	Classroom 108	Plaster Wall	NAD	х	1600	SF	х	х	
1	108	Classroom 108	Ceiling Tile 2' x 4'	Non Suspect ACM	х	800	SF	х	х	
1	108	Classroom 108	Plaster Ceiling	NAD	Х	800	SF	х	х	
1	108A	Classroom 108 Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	3	LF	x	x	
1	108A	Classroom 108 Restroom	Cement Floor	Non Suspect ACM	Х	80	SF	х	х	
1	108A	Classroom 108 Restroom	Plaster Wall	NAD	Х	200	SF	х	х	
1	108A	Classroom 108 Restroom	Plaster Ceiling	NAD	Х	80	SF	Х	х	
1	108B	Closet inside Classroom 108	12" x 12" Floor Tile & Mastic	NAD	x	50	SF	x	REM as NAD	No Asbestos Detected in Tan Floor Tile and associated Mastic
1	108B	Closet inside Classroom 108	Floor Tile VAT 9" x 9"	Confirmed	NF1	50	SF	ND	REM	
1	108B	Closet inside Classroom 108	Plaster Wall	NAD	Х	150	SF	Х	X	
1	108B	Closet inside Classroom 108	Ceiling Tile 2' x 4'	Non Suspect ACM	X	50	SF	х	X	
1	107B-1	Speech Therapist	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
1	107B-1	Speech Therapist	Cement Floor	Non Suspect ACM	Х	120	SF	Х	х	
1	107B-1	Speech Therapist	Plaster Wall	NAD	Х	200	SF	Х	х	
1	107B-1	Speech Therapist	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	х	х	
1	107B-1	Speech Therapist	Plaster Ceiling	NAD	Х	120	SF	х	х	
1	110	Special Education	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
1	110	Special Education	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	130	SF	ND	NRN	At Entrance to 110 and 110B only
1	110	Special Education	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	280	SF	ND	NRN	
1	110	Special Education	Tack Board Glue Dots	Assumed	NF1	12	SF	ND	NRN	
1	110	Special Education	Plaster Wall	NAD	X	1000	SF	х	X	
1	110	Special Education	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	450	SF	Х	X	

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		Dunbar Elementary School (5250)		Three- Year Reinspe	ection IX					
		1750 N 12th St., Philadelphia, PA 19122		X AIR/EIE						
		Prepared by: Bernard J. Bryson		X Asbestos Abateme						
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E						
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303			l, 202, 203, 20 ₄	, 205,			
F I o o r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
1	110	Special Education	Plaster Ceiling	NAD	Х	450	SF	х	х	
1	110B	Special Education Classroom Restroom	Pipe Fitting Insulation	Confirmed	FRI	7	EA	ND	NRN	
1	110B	Special Education Classroom Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	20	LF	ND	NRN	
1	110B	Special Education Classroom Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	36	LF	х	х	
1	110B	Special Education Classroom Restroom	Cement Floor	Non Suspect ACM	Х	100	SF	х	х	
1	110B	Special Education Classroom Restroom	Plaster Wall	NAD	Х	200	SF	х	х	
1	110B	Special Education Classroom Restroom	Plaster Ceiling	NAD	Х	100	SF	х	х	
2	200A	Large Book Closet next to Girl's Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	x	40	LF	x	x	
2	200A	Large Book Closet next to Girl's Restroom	Cement Floor	Non Suspect ACM	Х	150	SF	х	х	
2	200A	Large Book Closet next to Girl's Restroom	Plaster Wall	NAD	Х	300	SF	х	х	
2	200A	Large Book Closet next to Girl's Restroom	Plaster Ceiling	NAD	Х	150	SF	х	х	
2	200B	Janitor's Closet	Fiberglass Pipe Insulation	Non Suspect ACM	x	48	LF	x	x	
2	200B	Janitor's Closet	Cement Floor	Non Suspect ACM	Х	16	SF	х	х	
2	200B	Janitor's Closet	Plaster Wall	NAD	Х	80	SF	Х	Х	
2	200B	Janitor's Closet	Plaster Ceiling	NAD	X	16	SF	Х	Х	
2	200C	Small Closet beside Large Book Closet next to Girl's Restroom	Cement Floor	Non Suspect ACM	x	10	SF	х	х	
2	200C	Small Closet beside Large Book Closet next to Girl's Restroom	Plaster Wall	NAD	х	30	SF	х	х	
2	200C	Small Closet beside Large Book Closet next to Girl's Restroom	Plaster Ceiling	NAD	x	10	SF	x	x	
2	200D	Small Closet next to Stairwell beside Classroom 202	Cement Floor	Non Suspect ACM	x	10	SF	x	x	
2	200D	Small Closet next to Stairwell beside Classroom 202	Plaster Wall	NAD	x	30	SF	x	х	
2	200D	Small Closet next to Stairwell beside Classroom 202	Plaster Ceiling	NAD	х	10	SF	х	x	
2	200	Girl's Restroom	Pipe Fitting Insulation	Confirmed	FRI	3	EA	ND	NRN	
2	200	Girl's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	11	LF	ND	NRN	
2	200	Girl's Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	x	30	LF	х	х	
2	200	Girl's Restroom	Cement Floor	Non Suspect ACM	Х	420	SF	х	х	
2	200	Girl's Restroom	Plaster Wall	NAD	Х	1600	SF	х	х	
2	200	Girl's Restroom	Plaster Ceiling	NAD	Х	420	SF	х	х	
2	201	Classroom 201	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	REM	Metal Jacketing may be Present
2	201	Classroom 201	Blackboard Glue Dots	Assumed	NF1	220	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	201	Classroom 201	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
2	201	Classroom 201	Plaster Wall	NAD	Х	1600	SF	х	х	

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		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E						
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	l, 202, 203, 20 ₄	1, 205,			
F		Oldssroom modernization i roject	200, 200 0 000							
0 0 r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
2	201	Classroom 201	Ceiling Tile 2' x 4'	Non Suspect ACM	х	800	SF	х	х	
2	201	Classroom 201	Plaster Ceiling	NAD	х	800	SF	х	х	
2	201A	Coat Closet inside Classroom 201	Wood Floor	Non Suspect ACM	х	120	SF	х	х	
2	201A	Coat Closet inside Classroom 201	Plaster Wall	NAD	х	240	SF	х	х	
2	201A	Coat Closet inside Classroom 201	Ceiling Tile 2' x 4'	Non Suspect ACM	х	120	SF	х	х	
2	S26	Stairwell	Pipe Fitting Insulation	Confirmed	FRI	3	EA	ND	NRN	
2	S26	Stairwell beside Classroom 202	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
2	S26	Stairwell beside Classroom 202	Terrazzo Floor	Non Suspect ACM	х	450	SF	х	х	
2	S26	Stairwell beside Classroom 202	Plaster Wall	NAD	х	2000	SF	х	х	
2	S26	Stairwell beside Classroom 202	Plaster Ceiling	NAD	X	450	SF	X	X	
2	H27	Hallway	Pipe Insulation 2-6 inch	Confirmed	FRI	36	LF	ND	NRN	
2	H27	Hallway	Fiberglass Pipe Insulation	Non Suspect ACM	x	12	LF	x	x	
2	H27	Hallway	Terrazzo Floor	Non Suspect ACM	х	2400	SF	х	х	
2	H27	Hallway	Plaster Wall	NAD	х	5000	SF	х	х	
2	H27	Hallway	Ceiling Tile 2' x 4'	Non Suspect ACM	х	2400	SF	х	х	
2	H27	Hallway	Plaster Ceiling	NAD	х	2400	SF	х	х	
2	202	Classroom 202	Fiberglass Pipe Insulation	Non Suspect ACM	х	15	LF	х	x	
2	202	Classroom 202	Blackboard Glue Dots	Assumed	NF1	80	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	202	Classroom 202	Wood Floor	Non Suspect ACM	X	800	SF	х	х	
2	202	Classroom 202	Plaster Wall	NAD	X	1600	SF	Х	X	
2	202	Classroom 202	Ceiling Tile 2' x 4'	Non Suspect ACM	X	800	SF	X	Х	
2	202	Classroom 202	Plaster Ceiling	NAD	X	800	SF	X	Х	
2	202A	Coat Closet inside Classroom 202	Wood Floor	Non Suspect ACM	X	120	SF	X	х	
2	202A	Coat Closet inside Classroom 202	Plaster Wall	NAD	Х	240	SF	Х	Х	
2	202A	Coat Closet inside Classroom 202	Ceiling Tile 2' x 4'	Non Suspect ACM	X	120	SF	Х	Х	
2	203	Classroom 203	Pipe Insulation 2-6 inch	Confirmed	FRI	24	LF	ND	REM	Metal Jacketing may be Present
2	203	Classroom 203	Blackboard Glue Dots	Assumed	NF1	220	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	203	Classroom 203	Wood Floor	Non Suspect ACM	Х	800	SF	Х	х	
2	203	Classroom 203	Plaster Wall	NAD	Х	1600	SF	Х	х	
2	203	Classroom 203	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	Х	х	
2	203	Classroom 203	Plaster Ceiling	NAD	Х	800	SF	Х	Х	
2	203A	Coat Closet inside Classroom 203	Wood Floor	Non Suspect ACM	Х	120	SF	Х	Х	
2	203A	Coat Closet inside Classroom 203	Plaster Wall	NAD	Х	240	SF	х	Х	
2	203A	Coat Closet inside Classroom 203	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	Х	Х	
2	204	Classroom 204	Fiberglass Pipe Insulation	Non Suspect ACM	x	12	LF	x	х	
2	204	Classroom 204	Blackboard Glue Dots	Assumed	NF1	140	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards

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		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	l, 202, 203, 20 ₄	4, 205,			
F I o o r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
2	204	Classroom 204	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
2	204	Classroom 204	Plaster Wall	NAD	Х	1350	SF	х	х	
2	204	Classroom 204	Wood Partition Wall	Non Suspect ACM	Х	250	SF	х	х	
2	204	Classroom 204	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	х	х	
2	204	Classroom 204	Plaster Ceiling	NAD	Х	800	SF	х	х	
2	204A	Coat Closet inside Classroom 204	Wood Floor	Non Suspect ACM	х	120	SF	х	х	
2	204A	Coat Closet inside Classroom 204	Plaster Wall	NAD	Х	240	SF	х	х	
2	204A	Coat Closet inside Classroom 204	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	х	x	
2	205	Classroom 205	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	REM	Metal Jacketing may be Present
2	205	Classroom 205	Blackboard Glue Dots	Assumed	NF1	220	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	205	Classroom 205	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
2	205	Classroom 205	Plaster Wall	NAD	X	1600	SF	X	X	
2	205	Classroom 205	Ceiling Tile 2' x 4'	Non Suspect ACM	X	800	SF	X	x	
2	205	Classroom 205	Plaster Ceiling	NAD	X	800	SF	X	X	
2	205A	Coat Closet inside Classroom 205	Wood Floor	Non Suspect ACM	X	120	SF	X	X	
2	205A	Coat Closet inside Classroom 205	Plaster Wall	NAD	X	240	SF	X	X	
2	205A	Coat Closet inside Classroom 205	Ceiling Tile 2' x 4'	Non Suspect ACM	X	120	SF	x	X	
2	205D	Pipe Shaft in Hallway outside of Classroom 205	Pipe Insulation > 6 inch	Confirmed	FRI	30	LF	ND	NRN	
2	205D	Pipe Shaft in Hallway outside of Classroom 205	Cement Floor	Non Suspect ACM	х	4	SF	х	х	
2	205D	Pipe Shaft in Hallway outside of Classroom 205	Terra Cotta Wall	Non Suspect ACM	x	30	SF	х	х	
2	205D	Pipe Shaft in Hallway outside of Classroom 205	Concrete Block Ceiling	Non Suspect ACM	x	4	SF	x	x	
2	206	Classroom 206	Pipe Fitting Insulation	Confirmed	FRI	1	EA	ND	REM	
2	206	Classroom 206	Pipe Insulation 2-6 inch	Confirmed	FRI	9	LF	ND	REM	Metal Jacketing may be Present
2	206	Classroom 206	Fiberglass Pipe Insulation	Non Suspect ACM	x	6	LF	х	х	
2	206	Classroom 206	Blackboard Glue Dots	Assumed	NF1	140	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	206	Classroom 206	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
2	206	Classroom 206	Plaster Wall	NAD	Х	1350	SF	х	х	
2	206	Classroom 206	Wood Partition Wall	Non Suspect ACM	Х	250	SF	х	х	
2	206	Classroom 206	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	х	х	
2	206	Classroom 206	Plaster Ceiling	NAD	Х	800	SF	х	х	
2	206A	Coat Closet inside Classroom 206	Wood Floor	Non Suspect ACM	Х	120	SF	х	х	
2	206A	Coat Closet inside Classroom 206	Plaster Wall	NAD	Х	240	SF	х	х	
2	206A	Coat Closet inside Classroom 206	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	х	х	
2	205B	Boy's Restroom	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	NRN	
2	205B	Boy's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	1	LF	ND	NRN	

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		Dunbar Elementary School (5250)		Three- Year Reinsp	ection IX					
		1750 N 12th St., Philadelphia, PA 19122		X AIR/EIE						
		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	, 202, 203, 204	1, 205,			
F I O O r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
2	205B	Boy's Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	10	LF	х	х	
2	205B	Boy's Restroom	Cement Floor	Non Suspect ACM	Х	280	SF	х	х	
2	205B	Boy's Restroom	Plaster Wall	NAD	X	600	SF	х	X	
2	205B	Boy's Restroom	Plaster Ceiling	NAD	X	280	SF	X	Х	
2	205C	Health Room	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
2	205C	Health Room	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	180	SF	ND	NRN	
2	205C	Health Room	Plaster Wall	NAD	Х	400	SF	х	х	
2	205C	Health Room	Plaster Ceiling	NAD	Х	180	SF	х	х	
2	S22	Stairwell beside Classroom 206	Pipe Fitting Insulation	Confirmed	FRI	6	EA	ND	NRN	
2	S22	Stairwell beside Classroom 206	Pipe Insulation 2-6 inch	Confirmed	FRI	10	LF	ND	NRN	
2	S22	Stairwell beside Classroom 206	Terrazzo Floor	Non Suspect ACM	Х	450	SF	х	х	
2	S22	Stairwell beside Classroom 206	Plaster Wall	NAD	X	2000	SF	Х	Х	
2	S22	Stairwell beside Classroom 206	Plaster Ceiling	NAD	X	450	SF	Х	х	
2	207	Art Classroom 207	Pipe Insulation 2-6 inch	Confirmed	FRI	24	LF	ND	NRN	
2	207	Art Classroom 207	Fiberglass Pipe Insulation	Non Suspect ACM	x	12	LF	x	x	
2	207	Art Classroom 207	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	1120	SF	ND	NRN	
2	207	Art Classroom 207	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	1120	SF	ND	NRN	9x9s below 12s
2	207	Art Classroom 207	Plaster Wall	NAD	Х	2500	SF	х	х	
2	207	Art Classroom 207	Ceiling Tile 2' x 4'	Non Suspect ACM	х	1120	SF	х	х	
2	207	Art Classroom 207	Plaster Ceiling	NAD	X	1120	SF	х	X	
2	207A	Coat Closet inside Art Classroom 207	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	120	SF	ND	NRN	
2	207A	Coat Closet inside Art Classroom 207	Plaster Wall	NAD	Х	240	SF	х	х	
2	207A	Coat Closet inside Art Classroom 207	Ceiling Tile 2' x 4'	Non Suspect ACM	X	120	SF	Х	х	
2	207B	Classroom 207 Restroom	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	NRN	
2	207B	Classroom 207 Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	18	LF	ND	NRN	
2	207B	Classroom 207 Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	x	60	LF	x	x	
2	207B	Classroom 207 Restroom	Cement Floor	Non Suspect ACM	Х	120	SF	х	х	
2	207B	Classroom 207 Restroom	Plaster Wall	NAD	X	240	SF	х	х	
2	207B	Classroom 207 Restroom	Plaster Ceiling	NAD	X	120	SF	X	X	
2	207C	Classroom 207 Closet	Pipe Fitting Insulation	Confirmed	FRI	4	EA	ND	NRN	
2	207C	Classroom 207 Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	30	LF	ND	NRN	
2	207C	Classroom 207 Closet	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	72	SF	ND	NRN	
2	207C	Classroom 207 Closet	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	72	SF	ND	NRN	

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		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	1, 202, 203, 204	4, 205,			
F 1 0 0 r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
2	207C	Classroom 207 Closet	Plaster Wall	NAD	Х	150	SF	х	х	
2	207C	Classroom 207 Closet	Plaster Ceiling	NAD	Х	72	SF	х	х	
2	208	Classroom 208	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	REM	
2	208	Classroom 208	Pipe Insulation 2-6 inch	Confirmed	FRI	8	LF	ND	REM	Metal Jacketing may be Present
2	208	Classroom 208	Fiberglass Pipe Insulation	Non Suspect ACM	х	6	LF	х	х	
2	208	Classroom 208	Blackboard Glue Dots	Assumed	NF1	140	SF	ND	REM	Glue Dots Assumed Present behind Blackboards/Tack Boards
2	208	Classroom 208	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
2	208	Classroom 208	Plaster Wall	NAD	Х	1600	SF	х	х	
2	208	Classroom 208	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	х	х	
2	208	Classroom 208	Plaster Ceiling	NAD	Х	800	SF	х	х	
2	208A	Coat Closet inside Classroom 208	Wood Floor	Non Suspect ACM	Х	120	SF	х	х	
2	208A	Coat Closet inside Classroom 208	Plaster Wall	NAD	Х	240	SF	х	х	
2	208A	Coat Closet inside Classroom 208	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	х	х	
2	210	Counselor's Office	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
2	210	Counselor's Office	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	350	SF	ND	NRN	
2	210	Counselor's Office	Transite Wall Panels	Confirmed	NF2	120	SF	ND	NRN	
2	210	Counselor's Office	Plaster Wall	NAD	Х	700	SF	х	х	
2	210	Counselor's Office	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	350	SF	х	х	
2	210	Counselor's Office	Plaster Ceiling	NAD	Х	350	SF	х	х	
2	210A	Couselor's Office Restroom	Pipe Fitting Insulation	Confirmed	FRI	7	EA	ND	NRN	
2	210A	Couselor's Office Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	18	LF	ND	NRN	
2	210A	Couselor's Office Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	90	LF	x	х	
2	210A	Couselor's Office Restroom	Cement Floor	Non Suspect ACM	Х	80	SF	х	х	
2	210A	Couselor's Office Restroom	Plaster Wall	NAD	Х	160	SF	х	х	
2	210A	Couselor's Office Restroom	Plaster Ceiling	NAD	Х	80	SF	х	х	
2	208B	IT MDF Room outside Counselor's Office	Pipe Fitting Insulation	Confirmed	FRI	5	EA	ND	NRN	
2	208B	IT MDF Room outside Counselor's Office	Pipe Insulation 2-6 inch	Confirmed	FRI	36	LF	ND	NRN	
2	208B	IT MDF Room outside Counselor's Office	Cement Floor	Non Suspect ACM	Х	72	SF	х	х	
2	208B	IT MDF Room outside Counselor's Office	Plaster Wall	NAD	Х	150	SF	х	х	
2	208B	IT MDF Room outside Counselor's Office	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	72	SF	х	х	
2	208B	IT MDF Room outside Counselor's Office	Plaster Ceiling	NAD	Х	72	SF	х	х	
3	300B	Teacher's Lounge	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	500	SF	ND	NRN	
3	300B	Teacher's Lounge	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
3	300B	Teacher's Lounge	Plaster Wall	NAD	х	1000	SF	х	х	
3	300B	Teacher's Lounge	Ceiling Tile 2' x 4'	Non Suspect ACM	х	500	SF	х	х	
3	300B	Teacher's Lounge	Plaster Ceiling	NAD	Х	500	SF	х	х	
3	300C	Teacher's Lounge Kitchen	Pipe Fitting Insulation	Assumed	FRI	3	EA	ND	NRN	

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		Asbestos Inspection Report - Section 9		6 Month Surveil	lance					
		Dunbar Elementary School (5250)		Three- Year Reinsp	ection IX					
		1750 N 12th St., Philadelphia, PA 19122		X AIR/EIE						
		Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	I, 202, 203, 20 ₄	4, 205,			
F 1 0 0 r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
3	300C	Teacher's Lounge Kitchen	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
3	300C	Teacher's Lounge Kitchen	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	150	SF	ND	NRN	
3	300C	Teacher's Lounge Kitchen	Plaster Wall	NAD	х	300	SF	х	х	
3	300C	Teacher's Lounge Kitchen	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	150	SF	х	х	
3	300C	Teacher's Lounge Kitchen	Plaster Ceiling	NAD	Х	150	SF	х	х	
3	300D	Teacher's Lounge Kitchen Closet	Cement Floor	Non Suspect ACM	X	25	SF	Х	X	
3	300D	Teacher's Lounge Kitchen Closet	Plaster Wall	NAD	X	100	SF	X	X	
3	300D	Teacher's Lounge Kitchen Closet	Plaster Ceiling	NAD	X	25	SF	X	X	
3	309B	Classroom 309 Small Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
3	309B	Classroom 309 Small Closet	Fiberglass Pipe Insulation	Non Suspect ACM	х	30	LF	х	x	
3	309B	Classroom 309 Small Closet	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	60	SF	ND	NRN	
3	309B	Classroom 309 Small Closet	Plaster Wall	NAD	Х	200	SF	х	x	
3	309B	Classroom 309 Small Closet	Plaster Ceiling	NAD	Х	60	SF	х	x	
3	309A	Classroom 309 Large Closet	Pipe Fitting Insulation	Assumed	FRI	7	EA	ND	NRN	
3	309A	Classroom 309 Large Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	48	LF	ND	NRN	
3	309A	Classroom 309 Large Closet	Floor Tile VAT 9" x 9" & Mastic	Confirmed	NF1	200	SF	ND	NRN	
3	309A	Classroom 309 Large Closet	Plaster Wall	NAD	Х	400	SF	х	х	
3	309A	Classroom 309 Large Closet	Plaster Ceiling	NAD	Х	200	SF	х	х	
3	309	Classroom 309	Pipe Insulation 2-6 inch	Confirmed	FRI	24	LF	ND	NRN	
3	309	Classroom 309	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	1150	SF	ND	NRN	
3	309	Classroom 309	Blackboard Glue Dots	Assumed	NF1	30	SF	ND	NRN	
3	309	Classroom 309	Plaster Wall	NAD	Х	2000	SF	х	х	
3	309	Classroom 309	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	1150	SF	х	х	
3	309	Classroom 309	Plaster Ceiling	NAD	Х	1150	SF	х	х	
3	300	Computer Lab	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
3	300	Computer Lab	Blackboard Glue Dots	Assumed	NF1	160	SF	ND	NRN	
3	300	Computer Lab	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
3	300	Computer Lab	Plaster Wall	NAD	Х	1600	SF	х	х	
3	300	Computer Lab	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	х	х	
3	300	Computer Lab	Plaster Ceiling	NAD	Х	800	SF	х	х	
3	300A	Coat Closet inside Computer Lab 300	Wood Floor	Non Suspect ACM	Х	120	SF	х	х	
3	300A	Coat Closet inside Computer Lab 300	Plaster Wall	NAD	Х	240	SF	х	х	
3	300A	Coat Closet inside Computer Lab 300	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	х	х	
3	301C	Closet next to Girl's Restroom	Cement Floor	Non Suspect ACM	Х	80	SF	х	х	
3	301C	Closet next to Girl's Restroom	Plaster Wall	NAD	Х	160	SF	х	х	
3	301C	Closet next to Girl's Restroom	Plaster Ceiling	NAD	Х	80	SF	x	х	

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		Dunbar Elementary School (5250)		Three- Year Reinsp	ection IX					
		1750 N 12th St., Philadelphia, PA 19122		X AIR/EIE						
		Prepared by: Bernard J. Bryson		X Asbestos Abateme						
		Certification # 0437 Date: 12/31/2018		Bulk Sampling E						
		Gertification # 0437 Bate: 12/31/2010	Interior Renovations in			202 203 204	1 205	1		
		Classroom Modernization Project	206, 208 & 303	010331001113 102, 100,	107, 100, 201	., 202, 200, 20-	+, 2 00,			
F I o o r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
3	301D	Janitor's Closet	Fiberglass Pipe Insulation	Non Suspect ACM	х	36	LF	х	х	
3	301D	Janitor's Closet	Cement Floor	Non Suspect ACM	Х	16	SF	х	х	
3	301D	Janitor's Closet	Plaster Wall	NAD	Х	100	SF	х	х	
3	301D	Janitor's Closet	Plaster Ceiling	NAD	х	16	SF	х	х	
3	301B	Girl's Restroom	Cement Floor	Non Suspect ACM	Х	420	SF	х	х	
3	301B	Girl's Restroom	Plaster Wall	NAD	Х	1600	SF	х	х	
3	301B	Girl's Restroom	Plaster Ceiling	NAD	X	420	SF	Х	x	
3	301	Classroom 301	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
3	301	Classroom 301	Blackboard Glue Dots	Assumed	NF1	160	SF	ND	NRN	
3	301	Classroom 301	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
3	301	Classroom 301	Plaster Wall	NAD	Х	1600	SF	х	х	
3	301	Classroom 301	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	х	х	
3	301	Classroom 301	Plaster Ceiling	NAD	X	800	SF	х	х	
3	301A	Coat Closet inside Classroom 301	Wood Floor	Non Suspect ACM	Х	120	SF	x	х	
3	301A	Coat Closet inside Classroom 301	Plaster Wall	NAD	X	240	SF	х	х	
3	301A	Coat Closet inside Classroom 301	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	х	x	
3	302	Classroom 302	Blackboard Glue Dots	Assumed	NF1	80	SF	ND	NRN	
3	302	Classroom 302	Wood Floor	Non Suspect ACM	X	800	SF	Х	x	
3	302	Classroom 302	Plaster Wall	NAD	X	1600	SF	Х	x	
3	302	Classroom 302	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	Х	x	
3	302	Classroom 302	Plaster Ceiling	NAD	X	800	SF	X	x	
3	302A	Coat Closet inside Classroom 302	Wood Floor	Non Suspect ACM	Х	120	SF	Х	Х	
3	302A	Coat Closet inside Classroom 302	Plaster Wall	NAD	X	240	SF	Х	Х	
3	302A	Coat Closet inside Classroom 302	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	Х	х	
3	S36	Stairwell beside Classroom 309	Pipe Fitting Insulation	Assumed	FRI	17	EA	ND	NRN	
3	S36	Stairwell beside Classroom 309	Pipe Insulation 2-6 inch	Confirmed	FRI	54	LF	ND	NRN	
3	S36	Stairwell beside Classroom 309	Terrazzo Floor	Non Suspect ACM	Х	450	SF	х	х	
3	S36	Stairwell beside Classroom 309	Plaster Wall	NAD	Х	2000	SF	Х	х	
3	S36	Stairwell beside Classroom 309	Plaster Ceiling	NAD	Х	450	SF	Х	х	
3	303	Classroom 303	Fiberglass Pipe Insulation	Non Suspect ACM	х	12	LF	x	x	
3	303	Classroom 303	Wood Floor	Non Suspect ACM	X	800	SF	Х	х	
3	303	Classroom 303	Plaster Wall	NAD	X	1350	SF	Х	х	
3	303	Classroom 303	Sheetrock Wall	Non Suspect ACM	X	250	SF	Х	х	Between 303 and 305
3	303	Classroom 303	Ceiling Tile 2' x 4'	Non Suspect ACM	X	800	SF	Х	х	
3	303	Classroom 303	Plaster Ceiling	NAD	Х	800	SF	Х	х	
3	303	Classroom 303	Transite Tabletops	Assumed	NF2	1	EA	ND	REM	Teacher Demonstration Table Top with Metal Sink - 20 SF
3	303A	Coat Closet inside Classroom 303	Wood Floor	Non Suspect ACM	Х	120	SF	Х	х	
3	303A	Coat Closet inside Classroom 303	Plaster Wall	NAD	Х	240	SF	Х	х	
3	303A	Coat Closet inside Classroom 303	Ceiling Tile 2' x 4'	Non Suspect ACM	X	120	SF	X	X	

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		Certification # 0437 Date: 12/31/2018		Bulk Sampling E						
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303			l, 202, 203, 20 ₄	4, 205,			
F		·	,	Confirmed,	Туре	Amount of	SF	Condition	Action	
0 0 r	Space #	On Site Room Name	Material Description	Assumed, NAD, Non Suspect ACM	(Code 1)	Material	LF EA	(Code 2)	(Code 3)	Comments/Description/Notes
3	H311	Hallway	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
3	H311	Hallway	Fiberglass Pipe Insulation	Non Suspect ACM	х	12	LF	x	х	
3	H311	Hallway	Terrazzo Floor	Non Suspect ACM	Х	2400	SF	Х	x	
3	H311	Hallway	Plaster Wall	NAD	Х	5000	SF	х	х	
3	H311	Hallway	Ceiling Tile 2' x 4'	Non Suspect ACM	X	2400	SF	Х	Х	
3	H311	Hallway	Plaster Ceiling	NAD	X	2400	SF	Х	х	
3	305	Classroom 305	Fiberglass Pipe Insulation	Non Suspect ACM	х	12	LF	x	x	
3	305	Classroom 305	Wood Floor	Non Suspect ACM	X	800	SF	Х	Х	
3	305	Classroom 305	Plaster Wall	NAD	X	1600	SF	Х	Х	
3	305	Classroom 305	Sheetrock Wall	Non Suspect ACM	X	250	SF	Х	Х	Between 303 and 305
3	305	Classroom 305	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	Х	X	
3	305	Classroom 305	Plaster Ceiling	NAD	Х	800	SF	Х	x	
3	305A	Coat Closet inside Classroom 305	Wood Floor	Non Suspect ACM	Х	120	SF	Х	x	
3	305A	Coat Closet inside Classroom 305	Plaster Wall	NAD	Х	240	SF	Х	x	
3	305A	Coat Closet inside Classroom 305	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	Х	x	
3	304	Classroom 304	Fiberglass Pipe Insulation	Non Suspect ACM	x	12	LF	х	x	
3	304	Classroom 304	Carpet	Non Suspect ACM	x	800	SF	x	x	Floor Tile Assumed Below Carpeting
3	304	Classroom 304	Wood Floor	Non Suspect ACM	Х	800	SF	Х	x	
3	304	Classroom 304	Plaster Wall	NAD	X	1600	SF	Х	Х	
3	304	Classroom 304	Sheetrock Wall	Non Suspect ACM	X	250	SF	Х	Х	Between 304 and 306
3	304	Classroom 304	Ceiling Tile 2' x 4'	Non Suspect ACM	X	800	SF	Х	Х	
3	304	Classroom 304	Plaster Ceiling	NAD	X	800	SF	Х	Х	
3	304A	Coat Closet inside Classroom 304	Wood Floor	Non Suspect ACM	Х	120	SF	Х	Х	
3	304A	Coat Closet inside Classroom 304	Plaster Wall	NAD	X	240	SF	Х	Х	
3	304A	Coat Closet inside Classroom 304	Ceiling Tile 2' x 4'	Non Suspect ACM	X	120	SF	х	х	
3	306	Classroom 306	Fiberglass Pipe Insulation	Non Suspect ACM	Х	12	LF	х	х	
3	306	Classroom 306	Carpet	Non Suspect ACM	х	800	SF	х	х	Floor Tile Assumed Below Carpeting
3	306	Classroom 306	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
3	306	Classroom 306	Plaster Wall	NAD	Х	1600	SF	х	х	
3	306	Classroom 306	Sheetrock Wall	Non Suspect ACM	Х	250	SF	х	х	Between 304 and 306
3	306	Classroom 306	Ceiling Tile 2' x 4'	Non Suspect ACM	X	800	SF	х	х	
3	306	Classroom 306	Plaster Ceiling	NAD	Х	800	SF	х	х	
3	306A	Coat Closet inside Classroom 306	Wood Floor	Non Suspect ACM	Х	120	SF	х	х	
3	306A	Coat Closet inside Classroom 306	Plaster Wall	NAD	X	240	SF	Х	х	
3	306A	Coat Closet inside Classroom 306	Ceiling Tile 2' x 4'	Non Suspect ACM	X	120	SF	Х	Х	

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		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	, 202, 203, 204	1, 205,			
F I O O r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
3	305D	Pipe Shaft in Hallway outside of Classroom 305	Pipe Insulation > 6 inch	Confirmed	FRI	30	LF	ND	NRN	
3	305D	Pipe Shaft in Hallway outside of Classroom 305	Cement Floor	Non Suspect ACM	х	4	SF	х	х	
3	305D	Pipe Shaft in Hallway outside of Classroom 305	Terra Cotta Wall	Non Suspect ACM	х	30	SF	х	х	
3	305D	Pipe Shaft in Hallway outside of Classroom 305	Concrete Block Ceiling	Non Suspect ACM	х	4	SF	х	x	
3	305B	Closet next to Boy's Restroom	Cement Floor	Non Suspect ACM	Х	150	SF	х	х	
3	305B	Closet next to Boy's Restroom	Plaster Wall	NAD	Х	300	SF	х	х	
3	305B	Closet next to Boy's Restroom	Plaster Ceiling	NAD	Х	150	SF	х	х	
3	305C	Boy's Restroom	Pipe Fitting Insulation	Assumed	FRI	2	EA	ND	NRN	
3	305C	Boy's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	6	LF	ND	NRN	
3	305C	Boy's Restroom	Cement Floor	Non Suspect ACM	Х	420	SF	х	х	
3	305C	Boy's Restroom	Plaster Wall	NAD	Х	1600	SF	х	х	
3	305C	Boy's Restroom	Plaster Ceiling	NAD	Х	420	SF	х	х	
3	S32	Stairwell beside Classroom 308	Pipe Fitting Insulation	Assumed	FRI	8	EA	ND	NRN	
3	S32	Stairwell beside Classroom 308	Pipe Insulation 2-6 inch	Confirmed	FRI	35	LF	ND	NRN	
3	S32	Stairwell beside Classroom 308	Terrazzo Floor	Non Suspect ACM	х	450	SF	х	х	
3	S32	Stairwell beside Classroom 308	Plaster Wall	NAD	Х	2000	SF	х	х	
3	S32	Stairwell beside Classroom 308	Plaster Ceiling	NAD	Х	450	SF	х	х	
3	307	Classroom 307	Pipe Insulation 2-6 inch	Confirmed	FRI	24	LF	ND	NRN	
3	307	Classroom 307	Blackboard Glue Dots	Assumed	NF1	80	SF	ND	NRN	
3	307	Classroom 307	Wood Floor	Non Suspect ACM	X	1200	SF	X	X	
3	307	Classroom 307	Plaster Wall	NAD	Х	2400	SF	х	х	
3	307	Classroom 307	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	1200	SF	х	х	
3	307	Classroom 307	Plaster Ceiling	NAD	Х	1200	SF	х	х	
3	307A	Coat Closet inside Classroom 307	Wood Floor	Non Suspect ACM	х	120	SF	х	х	
3	307A	Coat Closet inside Classroom 307	Plaster Wall	NAD	х	240	SF	х	х	
3	307A	Coat Closet inside Classroom 307	Ceiling Tile 2' x 4'	Non Suspect ACM	х	120	SF	х	х	
3	307B	Classroom 307 Rear Closet	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
3	307B	Classroom 307 Rear Closet	Wood Floor	Non Suspect ACM	х	170	SF	х	х	
3	307B	Classroom 307 Rear Closet	Plaster Wall	NAD	х	340	SF	х	х	
3	307B	Classroom 307 Rear Closet	Plaster Ceiling	NAD	Х	170	SF	х	х	
3	308	Classroom 308	Pipe Insulation 2-6 inch	Confirmed	FRI	10	LF	ND	NRN	
3	308	Classroom 308	Fiberglass Pipe Insulation	Non Suspect ACM	х	8	LF	х	x	
3	308	Classroom 308	Blackboard Glue Dots	Assumed	NF1	160	SF	ND	NRN	
3	308	Classroom 308	Wood Floor	Non Suspect ACM	Х	800	SF	х	х	
3	308	Classroom 308	Plaster Wall	NAD	Х	1600	SF	х	х	
3	308	Classroom 308	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	800	SF	х	х	
3	308	Classroom 308	Plaster Ceiling	NAD	Х	800	SF	х	х	

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		Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
		Classroom Modernization Project	Interior Renovations in 206, 208 & 303	Classrooms 102, 105,	107, 108, 201	, 202, 203, 204	1, 205,			
F 1 0 0 r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
3	308A	Coat Closet inside Classroom 308	Wood Floor	Non Suspect ACM	Х	120	SF	х	х	
3	308A	Coat Closet inside Classroom 308	Plaster Wall	NAD	Х	240	SF	х	х	
3	308A	Coat Closet inside Classroom 308	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	120	SF	X	Х	
3	310	Classroom 310	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
3	310	Classroom 310	Floor Tile VAT 12" x 12" & Mastic	Assumed	NF1	450	SF	ND	NRN	
3	310	Classroom 310	Blackboard Glue Dots	Assumed	NF1	80	SF	ND	NRN	
3	310	Classroom 310	Plaster Wall	NAD	Х	900	SF	х	х	
3	310	Classroom 310	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	450	SF	х	х	
3	310	Classroom 310	Plaster Ceiling	NAD	Х	450	SF	х	х	
3	310C	Classroom 310 Restroom	Fiberglass Pipe Insulation	Non Suspect ACM	х	36	LF	х	х	
3	310C	Classroom 310 Restroom	Cement Floor	Non Suspect ACM	Х	60	SF	х	х	
3	310C	Classroom 310 Restroom	Plaster Wall	NAD	Х	120	SF	х	х	
3	310C	Classroom 310 Restroom	Plaster Ceiling	NAD	Х	60	SF	х	х	
3	310B	Teacher's Lounge	Pipe Insulation 2-6 inch	Confirmed	FRI	12	LF	ND	NRN	
3	310B	Teacher's Lounge	Cement Floor	Non Suspect ACM	Х	80	SF	х	х	
3	310B	Teacher's Lounge	Plaster Wall	NAD	Х	160	SF	х	х	
3	310B	Teacher's Lounge	Ceiling Tile 2' x 4'	Non Suspect ACM	Х	80	SF	х	х	
3	310B	Teacher's Lounge	Plaster Ceiling	NAD	Х	80	SF	х	х	
4	400	Outdoor Classroom 400	Cement Floor	Non Suspect ACM	Х	1500	SF	х	х	
4	400	Outdoor Classroom 400	Concrete Block Wall	Non Suspect ACM	Х	3000	SF	х	х	
4	400	Outdoor Classroom 400	Concrete Block Ceiling	Non Suspect ACM	Х	1500	SF	х	х	
4	401	Vestibule between South Stairwell and Outdoor Classroom 400	Cement Floor	Non Suspect ACM	x	500	SF	x	x	
4	401	Vestibule between South Stairwell and Outdoor Classroom 400	Concrete Block Wall	Non Suspect ACM	x	1500	SF	x	x	
4	401	Vestibule between South Stairwell and Outdoor Classroom 400	Concrete Block Ceiling	Non Suspect ACM	x	500	SF	x	x	
4	403	Girl's Restroom	Cement Floor	Non Suspect ACM	Х	500	SF	х	х	
4	403	Girl's Restroom	Concrete Block Wall	Non Suspect ACM	Х	1500	SF	х	х	
4	403	Girl's Restroom	Concrete Block Ceiling	Non Suspect ACM	Х	500	SF	х	х	
4	S46	Stairwell beside Girl's Restroom	Pipe Fitting Insulation	Confirmed	FRI	7	EA	ND	NRN	
4	S46	Stairwell beside Girl's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	30	LF	ND	NRN	
4	S46	Stairwell beside Girl's Restroom	Terrazzo Floor	Non Suspect ACM	Х	450	SF	х	х	
4	S46	Stairwell beside Girl's Restroom	Plaster Wall	NAD	Х	2000	SF	х	х	
4	S46	Stairwell beside Girl's Restroom	Plaster Ceiling	NAD	Х	450	SF	х	х	
4	404	Exterior Rooftop Gym	Cement Floor	Non Suspect ACM	Х	10000	SF	х	х	
4	404	Exterior Rooftop Gym	Concrete Block Wall	Non Suspect ACM	Х	1000	SF	х	Х	
4	404	Exterior Rooftop Gym	Cement Board Step Flashing	NAD	x	500	LF	x	x	

Non Suspect ACM			School District of Philadelphia		Survey Type						
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Certification # 0437 Date 12/31/2018 Interior Renovations in Classrooms 102, 105, 107, 108, 201, 202, 203, 204, 205, 206, 208 & 303			1750 N 12th St., Philadelphia, PA 19122		X AIR/EIE						
Classroom Modernization Project 208, 208 & 303 204, 205, 207, 108, 201, 202, 203, 204, 205, 208, 208 & 303 208, 208, 208 & 303 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208, 208 & 208, 208, 208, 208, 208, 208, 208, 208,			Prepared by: Bernard J. Bryson		X Asbestos Abateme	ent Activity					
Classroom Modernization Project 208, 208 & 303 204, 205, 207, 108, 201, 202, 203, 204, 205, 208, 208 & 303 208, 208, 208 & 303 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208 & 208, 208, 208 & 208, 208, 208, 208, 208, 208, 208, 208,			Certification # 0437 Date: 12/31/2018		Bulk Sampling E	vent					
F O Sale # On Site Room Name					Classrooms 102, 105,	107, 108, 201	I, 202, 203, 20	4, 205,			
4 404 Exterior Rooftop Gym Cement Board Step Flashing Flashing Confirmed FRI 2 EA ND NRN	1 0 0	Space #	On Site Room Name	Material Description	Assumed, NAD,		1	LF	1		Comments/Description/Notes
4		404	Exterior Rooftop Gym	Cement Board Step	NAD	х	500	LF	х	x	
4 S42 Stainwell beside Boy's Restroom	4	S42	Stairwell beside Boy's Restroom	Pipe Fitting Insulation	Confirmed	FRI	2	EA	ND	NRN	
4 S42 Stainwell beside Boy's Restroom Plaster Celling NAD	4	S42	Stairwell beside Boy's Restroom	Pipe Insulation 2-6 inch	Confirmed	FRI	14	LF	ND	NRN	
4 S42 Stainwell beside Boy's Restroom Plaster Celling NAD		S42	,	Terrazzo Floor	Non Suspect ACM	х		SF	х	х	
4 406 Vestibule between North Stairwell and Outdoor Classroom 407 Cement Floor Non Suspect ACM X 500 SF X X X Vestibule between North Stairwell and Outdoor Classroom 407 Concrete Block Wall Non Suspect ACM X 1500 SF X X X Vestibule between North Stairwell and Outdoor Classroom 407 Concrete Block Celling Non Suspect ACM X 500 SF X X X Vestibule between North Stairwell and Outdoor Classroom 407 Concrete Block Celling Non Suspect ACM X 500 SF X X X Vestibule between North Stairwell and Outdoor Classroom 407 Concrete Block Wall Non Suspect ACM X 500 SF X X X Vestibule between North Stairwell and Outdoor Classroom 407 Concrete Block Wall Non Suspect ACM X 500 SF X X X X X X X X X		S42		Plaster Wall							
4 406 Vestibule between North Stairwell and Outdoor Classroom 407 Cement Floor Non Suspect ACM X 500 SF X X X X X X X X X											
4 406	4	406		-	Non Suspect ACM		500	SF		х	
4	4	406		Concrete Block Wall	Non Suspect ACM	х	1500	SF	х	х	
4 407	4	406		Concrete Block Ceiling	Non Suspect ACM	х	500	SF	х	х	
4 407	4	407	Outdoor Classroom 407	Cement Floor	Non Suspect ACM	Х	1500	SF	х	х	
4 408	4	407	Outdoor Classroom 407	Concrete Block Wall	Non Suspect ACM	Х	3000	SF	х	х	
4 408	4	407	Outdoor Classroom 407	Concrete Block Ceiling		Х	1500	SF	х	х	
4 408 Boy's Restroom Concrete Block Ceiling Non Suspect ACM x 500 SF x x x		408				Х	500		х	х	
4 408A Boy's Restroom Pipe Chase Fiberglass Pipe Insulation Non Suspect ACM X 45 LF X X X X 408A Boy's Restroom Pipe Chase Cement Floor Non Suspect ACM X 50 SF X X X X X X X X X		408	Boy's Restroom	Concrete Block Wall	Non Suspect ACM	Х	1500		х	х	
4 408A Boy's Restroom Pipe Chase	4	408	Boy's Restroom	Concrete Block Ceiling	Non Suspect ACM	Х	500	SF	х	х	
4 408A Boy's Restroom Pipe Chase Concrete Block Wall Non Suspect ACM x 250 SF x x 4 408A Boy's Restroom Pipe Chase Concrete Block Ceiling Non Suspect ACM x 50 SF x x 5 500D Fresh Air Intake/Re-Circulation Concrete Block Wall Non Suspect ACM x 400 SF x x 5 500D Fresh Air Intake/Re-Circulation Concrete Block Wall Non Suspect ACM x 1000 SF x x 5 500D Fresh Air Intake/Re-Circulation Concrete Block Wall Non Suspect ACM x 1000 SF x x 4 500C Fan Room X X X X X X 5 500C Fan Room Concrete Block Wall Non Suspect ACM x 1200 SF x x 5 500C Fan Room Concrete Block Ceiling Non Suspect ACM x 1200 SF			,	Insulation	,	x			x	x	
4 408A Boy's Restroom Pipe Chase Concrete Block Ceiling Non Suspect ACM x 50 SF x x 5 500D Fresh Air Intake/Re-Circulation Cement Floor Non Suspect ACM x 400 SF x x 5 500D Fresh Air Intake/Re-Circulation Concrete Block Wall Non Suspect ACM x 400 SF x x 4 500C Fan Room Concrete Block Ceiling Non Suspect ACM x 400 SF x x 5 500C Fan Room Concrete Block Ceiling Non Suspect ACM x 400 SF x x 5 500C Fan Room Concrete Block Wall Non Suspect ACM x 1200 SF x x 5 500C Fan Room Concrete Block Ceiling Non Suspect ACM x 3000 SF x x 5 500C Fan Room Concrete Block Ceiling Non Suspect ACM x 300			· ·			X			Х	Х	
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4 500G Exhaust Fan Room	5									1	
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5 500E North End Penthouse - Water Holding Tank Room North End Penthouse - Water Holding Tank Room North End Penthouse - Water Holding Tank			North End Penthouse - Water Holding Tank		·						
North End Ponthouse, Water Helding Tank		500E	North End Penthouse - Water Holding Tank	Concrete Block Wall	Non Suspect ACM	x	800	SF	x	х	
5 500E Room SF x x	5	500E	North End Penthouse - Water Holding Tank	Concrete Block Ceiling	Non Suspect ACM	Х	400	SF	х	х	

		School District of Philadelphia		Survey Type						
		Asbestos Inspection Report - Section 9	6 Month Surveillance					j		
		Dunbar Elementary School (5250)	Three- Year Reinspection IX							
		1750 N 12th St., Philadelphia, PA 19122	X AIR/EIE							
		Prepared by: Bernard J. Bryson	X Asbestos Abatement Activity							
		Certification # 0437 Date: 12/31/2018	Bulk Sampling Event							
		Classroom Modernization Project	Interior Renovations in Classrooms 102, 105, 107, 108, 201, 202, 203, 204, 205, 206, 208 & 303							
F 1 0 0 r	Space #	On Site Room Name	Material Description	Confirmed, Assumed, NAD, Non Suspect ACM	Type (Code 1)	Amount of Material	SF LF EA	Condition (Code 2)	Action (Code 3)	Comments/Description/Notes
5	500G	South End Penthouse (Empty Room)	Cement Floor	Non Suspect ACM	Х	400	SF	Х	Х	
5	500G	South End Penthouse (Empty Room)	Concrete Block Wall	Non Suspect ACM	х	800	SF	х	х	
5	500G	South End Penthouse (Empty Room)	Concrete Block Ceiling	Non Suspect ACM	Х	400	SF	Х	х	
В	1B	Auditorium Supply Plenum (Sub Auditorium crawlspace)	x	x	x	x	х	x	x	Category "A" Space - No Asbestos Containing Material and No Visible Debris Identified
В	1C	Crawlspace beneath the 1st Floor Lunchroom (104/106)	x	x	x	x	х	x	х	110 linear feet of asbestos pipe insulation with 8 hard fittings are present; Category "B" Space - Asbestos pipe/pipe fitting insulation identified throughout the space with no visible debris or damage observed at time of the inspection
3	AA	Auditorium Attic	x	×	x	x	x	X	x	Accessible through a floor hatch in the 3rd Floor Teachers Lounge; No catwalks are present in this space. The plaster ceiling is not designed to support any additional weight
4	MA	Main Attic below the 4th Floor Play Deck/Crawlspace between the 3rd and 4th Floors	x	x	x	x	x	x	х	Category "A" Attic - No Asbestos Containing Material and No Visible Debris Identified



Asbestos Inspection Report School District of Philadelphia projects ONLY

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Dunbar Elementary School - Classroom Modernization Project

Project No. 010-4399

- 12. List all locations inspected that do NOT have asbestos containing material present: Refer to Section 9
- 13. List all materials assumed to be Asbestos Containing Materials that will not be disturbed by the Renovation/Demolition Activity. Note: If assumed materials will be impacted by the work, request a sampling strategy that meets OEMS approval. (Bulk sampling data also obtained in the Dunbar Elementary School's AHERA Management Plan)

ASSUMED MATERIALS									
12" x 12" floor tile & mastic (except for the confirmed	Fire Doors	Obsolete Brick Incinerator	Pipe Fitting Insulation on the 3 rd Floor						
non-asbestos floor tiles listed below)	Sink Undercoat Mastic	2 Sectional Boilers	Vibration Damper Cloth						
Glue dot adhesive behind blackboards and tack boards	Interior/Exterior Caulks (expansion seam, window, door, etc.)	Radiator Insulation – behind Recessed Radiators							
Black Vapor Barrier Mastic in the Main Attic	Roofing (field & flashing)	Transite Table Top in Classroom 303							

14. List all homogeneous materials present in this school (Only Positive or Negative Sampled Materials can be listed in box 14 below): (Bulk sampling data also obtained in the Dunbar Elementary School's AHERA Mgmt. Plan)

in box 14 below). (Bank sampling data also obtained in t	ne bullbar Liementary School's Affeka Mgmt. Flany			
ASBESTOS CONTAINING MATERIALS	NON-ASBESTOS MATERIALS			
Pipe Fitting Insulation throughout building (except on the 3 rd Floor, which is assumed asbestos-containing)	12" x 12" Floor Tile and Mastic in Classroom 102 (blue), Classroom 105 (grey), Classroom 105 Restroom (blue) and Classroom 108 (tan)			
2" - 6" Pipe Insulation throughout building	Generator Flue Insulation in the Old Ash Storage Room			
> 6" Pipe Insulation throughout building	Fiberglass pipe/pipe fitting insulation			
9" x 9" Floor Tile and Mastic throughout building	Plaster Walls and Ceilings throughout building			
Transite Wall Panels – 2 nd Floor Counselor's Office	2'x 4' Acoustical Ceiling Tiles throughout building			
Transite Electrical Panels – Basement Electrical Room	Auditorium Stage Curtains			
	Terrazzo Floors throughout building			
	Cement Board Step Flashing and associated Grey Caulk - Exterior Rooftop Gym (mounted to the lower walls, runs around the perimeter of the entire concrete roof/play deck)			
15. Caution labels affixed to all ACM?	⊠ No			
• •	he demolition or renovation activity must this Asbestos Inspection Report.			
Signature of Certified Asbestos Investigator: Date:	Signature of Building Owner: Date:			

12/31/2018